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Supreme Court, U.S.
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IN THE

Supreme Court of the United States

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., AND STRYKER SALES CORPORATION,
Petitioners,

v.

ZIMMER, INC. AND ZIMMER SURGICAL, INC.,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

The Patent Act provides that district courts "may increase . . damages up to three times the amount found or assessed." 35 U.S.C. § 284. Despite this permissive and discretionary language, the Federal Circuit requires, as a prerequisite to awarding enhanced damages under § 284, that a patentee prove by clear and convincing evidence that infringement was "willful," meaning both that (1) there was an objectively high likelihood that the infringer's actions constituted infringement, and (2) this likelihood was either known or so obvious that it should have been known to the accused infringer.

The questions presented are:

1. Has the Federal Circuit improperly abrogated the plain meaning of 35 U.S.C. § 284 by forbidding any award of enhanced damages unless there is a finding of willfulness under a rigid, two-part test, when this Court recently rejected an analogous framework imposed on 35 U.S.C. § 285, the statute providing for attorneys' fee awards in exceptional cases?

2. Does a district court have discretion under 35 U.S.C. § 284 to award enhanced damages where an infringer intentionally copied a direct competitor's patented invention, knew the invention was covered by multiple patents, and made no attempt to avoid infringing the patents on that invention?

PARTIES TO THE PROCEEDINGS

The following were parties to the proceedings in the U.S. Court of Appeals for the Federal Circuit:

1. Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation, petitioners on review, were plaintiffs-appellees below.

2. Zimmer, Inc. and Zimmer Surgical, Inc., respondents on review, were defendants-appellants below.

RULE 29.6 DISCLOSURE STATEMENT

Petitioner Stryker Corporation has no parent corporation, and no publicly held company owns ten percent or more of its stock.

Petitioner Stryker Puerto Rico, Ltd. is an indirect wholly-owned subsidiary of Stryker Corporation, which is a publicly held company that owns ten percent or more of Stryker Puerto Rico, Ltd.'s stock.

Petitioner Stryker Sales Corporation is a wholly-owned subsidiary of Stryker Corporation, which is a publicly held company that owns ten percent or more of Stryker Sales Corporation's stock.

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Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation (collectively, "Stryker") respectfully petition for a writ of *certiorari* to review the judgment of the United States Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The Federal Circuit's opinion (App. 26a-48a) is reported at 774 F.3d 1349 and its revised opinion (App. 3a-25a) is reported at 782 F.3d 649. The Federal Circuit's order denying rehearing *en banc* (App. 1a-2a) is reported at 596 F. App'x 924. The opinion of the District Court denying Respondent's motions for judgment as a matter of law and granting Petitioner's motions for enhanced damages and attorneys' fees (App. 49a-122a) is available at 2013 WL 6231533. The opinion of the District Court granting Petitioner's motion for summary judgment of infringement (App. 123a-134a) is unreported. The opinion of the District Court construing patent claim terms (App. 135a-173a) is available at 2012 WL 333814.

JURISDICTION

The Federal Circuit entered judgment on December 19, 2014, and denied rehearing *en banc* on March 23, 2015. App. 1a-2a, 26a-48a. This Court has jurisdiction pursuant to 28 U.S.C. § 1254(1).

STATUTE INVOLVED

Section 284 of the Patent Act, 35 U.S.C. § 284, provides in pertinent part as follows:

> Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.
>
> When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed. Increased damages under this paragraph shall not apply to provisional rights under section 154(d).

STATEMENT OF THE CASE

This case raises important questions of law that implicate the key aims of the patent system: promoting and protecting innovation while deterring wholesale copying of patented inventions.

The Patent Act provides, in simple and discretionary terms, that district courts "may increase . damages up to three times the amount found or assessed." 35 U.S.C. § 284. But the Federal

Circuit has effectively stripped district courts of the discretion to enhance patent damage awards for prevailing patentees by imposing a rigid willfulness framework on top of this otherwise flexible statute.

The plain language of § 284 is silent as to willfulness. Nevertheless, before even considering the propriety of enhanced damages, the Federal Circuit requires patentees to prove, by clear and convincing evidence, that an infringer's defenses were objectively unreasonable, and if so, that the infringer acted in subjective bad faith. The Federal Circuit then conducts a *de novo* review of the objective reasonableness of an infringer's defenses, giving no deference to the district court's assessment of an infringer's positions. Just last term, this Court wholly rejected an analogous framework imposed by the Federal Circuit on the discretionary statute governing attorneys' fee awards in patent cases, 35 U.S.C. § 285.

The Federal Circuit's current willfulness framework undermines the intended deterrent effect of § 284 by immunizing infringers from enhanced damages so long as they present at least one plausible defense at the post-trial appellate stage. In other words, under the Federal Circuit's rule, an adjudged infringer can copy a direct competitor's pioneering invention in bad faith but escape punitive damages simply by engaging skilled counsel to advance an unsuccessful but ultimately credible defensive argument on appeal, regardless of whether the infringer relied on or even knew about that defense prior to engaging in its infringing acts.

In this case, the District Court and jury both found that Petitioner Stryker proved willfulness by clear and convincing evidence. As a result, and given the egregiousness of Respondent Zimmer's infringement, the District Court exercised its discretion under § 284 to treble Stryker's damage award. On appeal, however, the Federal Circuit reviewed objective willfulness *de novo*, reversed, and vacated Stryker's treble damages, despite affirming for Stryker on all liability issues. This case vividly illustrates the tension between the discretionary enhancement scheme envisioned by Congress and the impermissible barriers to enhancement erected by the Federal Circuit.

FACTS AND PROCEEDINGS BELOW

This petition arises from a patent infringement lawsuit brought by an industry leader in the medical device field against its direct competitor. The patentee in this case asserted its patents not to extract licensing fees, but to protect its investment in innovation.

The District Court, which lived with this case for almost three years, summarized the facts as follows:

> [P]ulsed lavage devices had, for years, served an important function in surgical procedures—cleaning out wounds and removing necrotic tissue from wound sites. Early-model pulsed lavage

devices were bulky and required a centralized power source. They had to be wheeled around a hospital, from one room to another. Stryker solved the problems associated with the size and power needs of pulsed lavage devices by designing a portable, disposable, battery-powered, hand-held pulsed lavage device. Zimmer's Manufacturing Manager and Rule 30(b)(6) witness agreed that Stryker products were "pioneering."

Zimmer had no answer for Stryker's new technology and saw its market share fall precipitously, to the point where Zimmer's presence in the pulsed lavage marketplace was at risk. Rather than relying on their own engineers to develop an alternative, Zimmer hired an independent contractor with no experience in pulsed lavage devices. In essence, Zimmer handed the independent contractor a copy of Stryker's product and said, "Make one for us." Under those conditions, it is not surprising that the finished Zimmer product turned out to look and function like Stryker's product. Nevertheless, Zimmer got its product to market quickly and in direct competition with Stryker. In doing so, it did not seek advice of outside patent counsel to assess the potential for infringement of

> Stryker's patents, or to opine on the validity of Stryker's patents.
>
> Once Zimmer introduced its competing product, there was fierce, direct market competition between Stryker and Zimmer. Zimmer constantly sought to lure customers away from Stryker and had a fair amount of success in doing so with its new product. Then, in 2007, Zimmer was forced to pull its product from the market due to technical problems. Zimmer had received so many complaints about its product that it decided to cease production entirely and not re-start production until December 2008, when it reentered the market. Upon reentering the market, Zimmer recaptured most of the market share it had forfeited by its year-plus absence.

App. 50a-52a.

Stryker filed suit in December 2010, alleging infringement of three patents, U.S. Patent Nos. 6,022,329 ("the '329 patent"), 6,179,807 ("the '807 patent"), and 7,144,383 ("the '383 patent").

On November 29, 2012, the District Court granted Stryker's motion for summary judgment of infringement as to all twenty asserted claims of the '807 and '383 patents and as to all but one claim element of the '329 patent. App. 123a-134a.

Importantly, even after the District Court found infringement on summary judgment, Zimmer made no effort to stop infringing Stryker's patents or to mitigate damages. The case then proceeded to trial on a single infringement issue relating to the '329 patent, Zimmer's invalidity defenses for all three patents-in-suit, Stryker's claim for willful infringement, and damages.

The District Court summarized the jury verdict as follows:

> After two weeks of trial—featuring hundreds of exhibits and more than a dozen witnesses—and multiple days of deliberation, the jury returned a verdict unequivocally in Stryker's favor. In particular, the jury found: (1) that the Pulsavac Plus products infringed claim 2 of the 329 patent; (2) that Zimmer failed to establish any of its 22 invalidity contentions; and (3) that Stryker was entitled to $70 million in lost profits. The jury also found that Zimmer willfully infringed the valid claims under the patents-in-suit.

App. 50a (internal citations omitted).

The District Court denied all of Zimmer's post-trial motions. App. 49a-122a. With respect to Zimmer's motion for JMOL of no willfulness, the District Court expressly reviewed both prongs of the

Federal Circuit's willfulness test and found in Stryker's favor on both. App. 73a-79a.

The District Court further observed the following:

> Zimmer lost every argument it advanced at claim construction, then lost most of the disputed claims on summary judgment. It lost all of its remaining claims at trial. At the time the jury announced its verdict, Zimmer had not changed its product design. This is consistent with both the market and litigation strategy that Zimmer has followed for years. Zimmer chose a high-risk/high-reward strategy of competing immediately and aggressively in the pulsed lavage market and opted to worry about the potential legal consequences later. When Stryker sued, Zimmer's able counsel offered the most plausible defenses that were available to them given Zimmer's pre-litigation market conduct. *Ultimately, however, the trial proofs demonstrated that this was not a close case. The relative quality of the expert testimony on liability was notably favorable to Stryker.*

App. 52a-53a (emphasis added).

In analyzing Stryker's motion for enhanced damages, the District Court considered the totality of the circumstances, including Zimmer's admitted copying, its failure to investigate the scope of Stryker's patents, and the long duration of its infringement. App. 116a-120a. The District Court again noted that "this was not a close case," given that "[e]very major decision—from claim construction through post-verdict motions—went against Zimmer," among many other considerations. App. 118a. Accordingly, the District Court exercised its discretion to treble Stryker's damages award of $70 million. App. 119a. The District Court separately granted Stryker's motion for a finding of exceptional case under 35 U.S.C. § 285 and awarded Stryker its reasonable attorneys' fees. App. 108a-110a.

On appeal, Zimmer did not challenge subjective willfulness but touted the objective reasonableness of some of its noninfringement and invalidity defenses. The Federal Circuit affirmed the District Court's grant of summary judgment of infringement of the '807 and '383 patents, the jury's finding of infringement of the '329 patent, the jury's rejection of all 22 of Zimmer's invalidity defenses, and the jury's award of lost-profits damages. App. 8a-20a. However, the Federal Circuit reversed on willfulness, determining *de novo* that, although all of Zimmer's defenses were unsuccessful, Zimmer had presented a reasonable defense as to each of the three patents-in-suit. App. 21a-24a. Having reversed on willfulness, the Federal Circuit summarily vacated the District Court's treble damages award and vacated and remanded the

District Court's finding of exceptional case and award of attorneys' fees. App. 25a.

Stryker filed a petition for rehearing *en banc*, urging the Federal Circuit to reevaluate the appropriate standards for granting enhanced damages in light of this Court's *Octane Fitness* and *Highmark* decisions. The Federal Circuit denied the petition on March 23, 2015. App. 1a-2a.

STATUTORY FRAMEWORK

A. The Grafting Of Willfulness Onto 35 U.S.C. § 284

Treble damages have been a part of U.S. patent law since the Patent Act of February 21, 1793, which allowed a patentee to recover, in an action at law, "a sum, that shall be at least equal to three times the price, for which the patentee has usually sold or licensed to other persons, the use of [the invention] . ." Patent Act of 1793, Ch. 11, § 5. The Patent Act of 1800 also allowed a patentee to recover "a sum equal to three times the actual damages sustained by [the] patentee." Patent Act of 1800, Ch. 25, § 3. Under these provisions, treble damage awards were automatic.

Treble damages were committed to the discretion of the district court in 1836, and remained so through ensuing revisions of the Patent Act. *See* Patent Act of 1836, Ch. 357, § 14 ("[I]t shall be in the power of the court to render judgment for any sum

above the amount found . . . not exceeding three times the amount thereof, according to the circumstances of the case . . . ." (emphasis added)); *see also* Patent Act of 1870, Ch. 230, § 59.

The current statute, enacted in 1952 and codified at 35 U.S.C. § 284, also includes a discretionary enhanced damages provision: "[T]he court *may* increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284 (emphasis added). Notably, neither § 284 nor its predecessors have conditioned a district court's discretion to enhance damages on willfulness, bad faith, or any other exceptional circumstances.

In the past, the Federal Circuit recognized that enhanced damages may be appropriate in a variety of circumstances. A finding of willful infringement was one such situation. *See, e.g.*, *Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1364–65 (Fed. Cir. 1998); *see also Amsted Indus. Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 183–84 (Fed. Cir. 1994); *SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1468–69 (Fed. Cir. 1997). Absent a finding of willful infringement, bad faith alone could also support an award of enhanced damages. *See, e.g.*, *Yarway Corp. v. Eur-Control USA, Inc.*, 775 F.2d 268, 277 (Fed. Cir. 1985); *King Instruments Corp. v. Perego*, 65 F.3d 941, 947 (Fed. Cir. 1995). The Federal Circuit further recognized that enhanced damages could serve a compensatory purpose by allowing for discretionary increases where the amount of damages that could be proven by a successful plaintiff was inadequate to

compensate for the infringement. *See, e.g.*, *King*, 65 F.3d at 951 n.6; *see also Sherman Indus., Inc. v. Proto-Vest, Inc.*, 732 F.2d 168 (Fed. Cir. 1984).

The Federal Circuit historically analyzed willfulness under the totality of the circumstances, which included "not only such aspects as the closeness or complexity of the legal and factual questions presented, but also commercial factors that may have affected the infringer's actions. Aspects in mitigation, such as whether there was independent invention or attempts to design around and avoid the patent or any other factors tending to show good faith, should be taken into account and given appropriate weight." *SRI*, 127 F.3d at 1465; *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1342 (Fed. Cir. 2004) (*en banc*) ("Determination of willfulness is made on consideration of the totality of the circumstances."); *nCube Corp. v. SeaChange Int'l, Inc.*, 436 F.3d 1317, 1323–24 (Fed. Cir. 2006).

If a basis for enhancing damages existed (such as willfulness, bad faith, or compensatory reasons), the Federal Circuit then applied a multi-factor discretionary test to determine whether, and to what extent, enhanced damages under § 284 were appropriate. *See, e.g.*, *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826–28 (Fed. Cir. 1992). These factors accounted for a wide range of considerations, including: "whether the infringer deliberately copied the ideas or design of another"; the "[c]loseness of the case"; the "[d]uration of [the] defendant's

misconduct"; and any "[r]emedial action by the defendant." *Id.*

The willfulness landscape changed in 2007 with the Federal Circuit's decision in *Seagate*. There, the *en banc* Federal Circuit announced that "an award of enhanced damages *requires* a showing of willful infringement." *In re Seagate Tech., LLC*, 497 F.3d 1360, 1368 (Fed. Cir. 2007) (*en banc*) (emphasis added). The Federal Circuit also articulated a rigid and more stringent test for willful infringement that no longer considered the totality of the circumstances.

Under the new *Seagate* test, willfulness (and thus entitlement to seek enhanced damages) must be proven by first establishing with clear and convincing evidence that "the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent." *Id.* at 1371. "The state of mind of the accused infringer is not relevant" to this first inquiry. *Id.* If the "threshold objective standard is satisfied," then the patent owner must establish by clear and convincing evidence that "this objectively-defined risk was either known or so obvious that it should have been known to the accused infringer." *Id.* The *Seagate* court "le[ft] it to future cases to further develop the application of this standard." *Id.*

"Future cases," including this one, have established that "[o]bjective recklessness will not be found where the accused infringer's 'position is susceptible to a reasonable conclusion of no

infringement'" or invalidity.[1] App. 22a (*citing Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1310 (Fed. Cir. 2011)); *see also Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 769 F.3d 1371, 1382 (Fed. Cir. 2014); *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319–20 (Fed. Cir. 2010). Indeed, the Federal Circuit has expressly held that arguments and theories developed solely for litigation and not previously known to the infringer can preclude a finding of objective recklessness, unless they are shown to be unreasonable by clear and convincing evidence. *See Global Traffic Techs. LLC v. Morgan*, Nos. 2014-1537, 2014-1566, 2015 WL 3513416, at *7 (Fed. Cir. June 4, 2015). In short, under the current framework, the objective recklessness inquiry has become dispositive of willfulness. Even in circumstances involving egregious copying and bad faith, enhanced damages cannot be awarded unless the patentee can prove the absence of any plausible defensive arguments. *See, e.g.*, App. 21a-24a.

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[1] In *Commil USA, LLC v. Cisco Systems, Inc.*, 135 S. Ct. 1920, 1928 (2015), this Court held that a defendant's reasonable belief of patent invalidity is not a defense to a claim of induced infringement under 35 U.S.C. § 271(b). In particular, the Court explained that, "if belief in invalidity were a defense to induced infringement, the force of [the] presumption [of patent validity under 35 U.S.C. § 282(a)] would be lessened to a drastic degree, for a defendant could prevail if he proved he reasonably believed the patent was invalid. That would circumvent the high bar Congress is presumed to have chosen: the clear and convincing standard." *Id.* at 1929. *Commil* does not directly address whether an adjudged infringer can defeat willfulness and enhanced damages by relying solely on a reasonable belief of invalidity.

The Federal Circuit long treated willfulness as a question of fact reviewed with deference to the factfinder, and this practice continued in the years immediately after *Seagate*. *See, e.g.*, *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1228 (Fed. Cir. 2011) ("Willfulness is a question of fact, and our review on appeal is 'limited to asking whether [the jury's] verdict is supported by substantial evidence.'") (quoting *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 859 (Fed. Cir. 2010)). Then, in 2012, a panel of the Federal Circuit changed course and held that "the objective determination of recklessness, even though predicated on underlying mixed questions of law and fact, is best decided by the judge as a question of law subject to *de novo* review." *See Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1007–08 (Fed. Cir. 2012).

In summary, prior to considering whether enhanced damages may be awarded under 35 U.S.C. § 284, the Federal Circuit now requires a finding of willfulness based on a two-part objective/subjective test requiring clear and convincing evidence, where the objective prong is reviewed *de novo* and cannot be met barring a complete absence of plausible defenses on appeal.

B. The Parallel Prejudgment Interest and Exceptional Case Jurisprudence

While this Court has not yet provided guidance to the Federal Circuit regarding the

enhanced damages language of § 284, it has analyzed the prejudgment interest language of that provision, which reads: "Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement . . together with interest and costs as fixed by the court." 35 U.S.C. § 284. In *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 653 (1983), the Court refused to impose a common law standard of exceptionality onto the prejudgment interest statute, holding that "[o]n the face of § 284, a court's authority to award interest is not restricted to exceptional circumstances, and there is no warrant for imposing such a limitation. When Congress wished to limit an element of recovery in a patent infringement action, it said so explicitly." The Court observed that, while § 285 expressly provides that a court can award attorneys' fees to a prevailing party only "in exceptional cases," the power to award interest under § 284 was "not similarly restricted." *Id.*

This Court has also given clear instructions on interpreting the attorneys' fees provision of § 285. Although the availability of attorneys' fees under the terms of the statute is more limited than prejudgment interest, the *Brooks Furniture* test that the Federal Circuit had used to determine what constituted an "exceptional case" under § 285 was held to be too narrow. *Brooks Furniture* imposed a two-part objective-subjective inquiry similar, if not identical, to the *Seagate* test for willfulness. *See Brooks Furniture Mfg., Inc. v. Dutailier Int'l, Inc.*, 393 F.3d 1378, 1381 (Fed. Cir. 2005) ("A case may be deemed exceptional [a]bsent misconduct in

conduct of the litigation or in securing the patent . . . only if both (1) the litigation is brought in subjective bad faith, and (2) the litigation is objectively baseless."); *see also iLOR, LLC v. Google, Inc.*, 631 F.3d 1372, 1377 (Fed. Cir. 2011) ("The objective baselessness standard for enhanced damages and attorneys' fees against a non-prevailing plaintiff under *Brooks Furniture* is *identical* to the objective recklessness standard for enhanced damages and attorneys' fees against an accused infringer for § 284 willful infringement actions under [*Seagate*]." (emphasis added)). The Federal Circuit also reviewed the objective prong of the *Brooks Furniture* test *de novo*, a standard of review it likewise applied to the *Seagate* test. *See Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 687 F.3d 1300, 1309 (Fed. Cir. 2012).

Last year, this Court overturned the Federal Circuit's § 285 framework in its entirety, including both the *Brooks Furniture* test and *de novo* review of exceptional case determinations. *See Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749 (2014); *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744 (2014).

In *Octane Fitness*, this Court concluded that the *Brooks Furniture* test was "unduly rigid," especially given the "inherently flexible" and discretionary nature of § 285. *See* 134 S. Ct. at 1755–56. The Court noted that the text of § 285 "is patently clear" and "imposes one and only one constraint on district courts' discretion to award attorney's fees in patent litigation: The power is

reserved for 'exceptional' cases." *Id.* Under § 285, "[d]istrict courts may determine whether a case is 'exceptional' in the case-by-case exercise of their discretion, considering the totality of the circumstances." *Id.* at 1756. The Court explained that "a case presenting *either subjective bad faith or exceptionally meritless claims* may sufficiently set itself apart from mine-run cases to warrant a fee award." *Id.* at 1757 (emphasis added).

In *Highmark*, the companion case to *Octane Fitness*, the Court held that district courts' exceptional case determinations under § 285 must be reviewed for abuse of discretion, not *de novo*. 134 S. Ct. at 1748. The Court explained that, "as a matter of the sound administration of justice, the district court is better positioned to decide whether a case is exceptional because it lives with the case over a prolonged period of time," especially because "the [exceptionality] question is 'multifarious and novel, not susceptible to useful generalization of the sort that *de novo* review provides." *Id.* at 1748–49 (internal citations and quotation marks omitted).

Individual Federal Circuit judges disagree on how this Court's *Octane Fitness* and *Highmark* decisions pertaining to the *Brooks Furniture* test and § 285 impact the Federal Circuit's formerly "identical" willfulness jurisprudence and its interpretation of § 284. *See Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 780 F.3d 1357, 1362–64 (Fed. Cir. 2015) (O'Malley, J., joined by Hughes, J., dissenting). The Court's guidance is required to clarify this uncertainty.

REASONS FOR GRANTING THE PETITION

This case warrants *certiorari* review because the Federal Circuit's treatment of enhanced damages is inconsistent with the plain language of 35 U.S.C. § 284 and this Court's precedent. Specifically, the Federal Circuit has improperly grafted a rigid willfulness requirement onto § 284, the discretionary enhanced damages statute. The plain text of § 284 "unambiguously omits any such requirement." *Seagate*, 497 F.3d at 1377 (Gajarsa, J., joined by Newman, J., concurring). This Court should grant *certiorari* to clarify that the Federal Circuit must "adhere to the plain meaning of the statute and leave the discretion to enhance damages in the capable hands of the district courts." *See id.*

In addition, the Federal Circuit's willfulness framework cannot be reconciled with this Court's precedents interpreting related provisions, including a pair of decisions last term concerning the availability of attorneys' fees under 35 U.S.C. § 285. Moreover, the Federal Circuit's existing jurisprudence utterly negates the intended deterrent effect of § 284 because even bad-faith infringers can defeat enhanced damages on appeal simply by retaining skillful counsel to create a merely reasonable post-suit defense, regardless of whether such defense is correct, and regardless of whether the infringer was even aware of or relied upon such defense prior to engaging in its infringing acts.

The district court, not the appellate court, is best suited to assess the propriety of enhancing

damages in a given case. In the past, the Federal Circuit's approach to enhanced damages appropriately placed the balance of authority in the factfinder's hands. Over time, however, a series of Federal Circuit decisions has shifted that balance away from the district court and the jury and toward the appellate court. As a consequence, district courts' discretionary awards of enhanced damages have, for all intents and purposes, been subject to *de novo* review in every respect. The judges of the Federal Circuit clearly disagree about the correctness of the existing law, but the court as a whole appears unwilling to reconsider the issue. This Court's guidance is required to resolve that dispute.

I. WILLFULNESS SHOULD NOT BE A PREREQUISITE FOR ENHANCED DAMAGES

A. The Federal Circuit's Enhancement Regime Is Unsupportable Given The Plain Language Of § 284

The § 284 analysis should begin and end with the text of the statute. *Cf. Octane Fitness*, 134 S. Ct. at 1755. The Federal Circuit's interpretation of § 284 as requiring a predicate finding of willfulness is inconsistent with the statutory text, which states only that "the court may increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284. This text is "patently clear"—it allows for enhanced damages at the district court's

discretion, with no additional restrictions. *Cf. Octane Fitness*, 134 S. Ct. at 1755.

Despite the plain language of § 284, the Federal Circuit has ruled that district courts cannot exercise their discretion to enhance damages unless a patentee has first proven willfulness by clear and convincing evidence. *See Seagate*, 497 F.3d at 1368, 1371. Moreover, the Federal Circuit has instituted a rigid, two-prong test for willfulness under which patentees must first show that an infringer had no objectively reasonable defenses before the infringer's bad faith can even be considered. *See id.* at 1371. Worse still, the infringer can rely on defenses devised solely for litigation, *see Global Traffic*, 2015 WL 3513416, at *7, and the Federal Circuit will review the reasonableness of those defenses *de novo* on appeal. *See Bard*, 682 F.3d at 1007. The Federal Circuit's rigid and inflexible willfulness framework is so demanding that it renders enhanced damages under § 284 largely unattainable. *Cf. Octane Fitness*, 134 S. Ct. at 1756–58.

In enacting § 284, Congress could not have envisioned this rigid regime that finds no support in the plain language of the statute. Indeed, when § 284 was reenacted as part of the America Invents Act in 2011, Congress decided not to include the *Seagate* standard for willfulness, after explicitly considering the issue. *See* S. Rep. No. 111 18, at 94–95 (2009); S. 23, 112th Cong. (Jan. 25, 2011). An initial version of the statute had included such a ratification but prompted serious opposition, and

ultimately this provision was removed from the bill in order to ensure passage.

In keeping with the statutory text, § 284 should be interpreted as written to allow district courts to consider the totality of the circumstances in determining whether, and by how much, to enhance patent damages.

B. The Federal Circuit's Grafting of a Willfulness Requirement Onto § 284 Is Flatly Inconsistent With Parallel Supreme Court Cases

Although this Court has not yet interpreted the enhanced damages portion of § 284, it has established guideposts in its reading of the prejudgment interest portion of § 284 in its *General Motors* decision. The relevant text of § 284 states that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement . . . together with interests and costs as fixed by the court." 35 U.S.C. § 284. Prior to *General Motors*, the appellate courts had reached differing conclusions as to whether an award of prejudgment interest under § 284 should be confined to cases in which the so-called *Duplate* standard was satisfied. *See General Motors*, 461 U.S. at 650–53. This Court held that the language of § 284 was clear and did not incorporate any such restriction:

> We have little doubt that § 284 does not incorporate the *Duplate* standard.

> Under that standard, which evolved as a matter of federal common law, prejudgment interest could not be awarded where damages were unliquidated absent bad faith or other exceptional circumstances. By contrast, § 284 gives a court general authority to fix interest and costs. On the face of § 284, a court's authority to award interest is not restricted to exceptional circumstances, and there is no warrant for imposing such a limitation.

Id. at 653.

This same analysis applies equally to the enhanced damages component of § 284. Like the prejudgment interest language, the enhanced damages language does not restrict district courts' discretion to exceptional circumstances. Because the plain text of § 284 regarding enhanced damages includes no limiting language whatsoever, the Federal Circuit's continued grafting of a rigid willfulness requirement onto § 284 conflicts with the principles established by this Court in *General Motors*.

Equally troubling, the Federal Circuit's enhancement regime is also inconsistent with this Court's opinion in *Octane Fitness*, interpreting the awarding of attorneys' fees under 35 U.S.C. § 285. Like § 284, § 285 gives district courts discretion to award "reasonable attorney fees to the prevailing party," but unlike § 284, § 285 limits this discretion

to "exceptional cases." Based on the statutory language alone, district courts are *less* constrained in their discretion to award enhanced damages than they are in their discretion to award attorneys' fees. Yet this Court has already ruled that, under § 285, "[d]istrict courts may determine whether a case is 'exceptional' in the case-by-case exercise of their discretion, considering the totality of the circumstances." *Octane Fitness*, 134 S. Ct. at 1756. *A fortiori*, district courts must have at least that same discretion under the less restrictive § 284.

This Court should grant *certiorari* and clarify that § 284, like § 285, must be interpreted to allow district courts the discretion to consider the full range of relevant circumstances in determining when, and to what extent, enhanced damages are appropriate in any given case.

C. The Judges Of The Federal Circuit Disagree About The Propriety of Grafting Willfulness Onto § 284

The need for this Court's guidance is further underscored by the Federal Circuit's confusion and disagreement over the proper interpretation of the enhanced damages language of § 284. In *Seagate*, two Federal Circuit judges wrote separately to express their view that willfulness should not be a prerequisite to an award of enhanced damages; rather, under § 284, the district court should have flexibility to enhance damages in appropriate circumstances. *See Seagate*, 497 F.3d at 1376–84

(Gajarsa, J., joined by Newman, J., concurring). These judges noted that, because "the language of the statute unambiguously omits" a willfulness requirement and "because there is no principled reason for continuing to engraft a willfulness requirement onto section 284," the Federal Circuit "should adhere to the plain meaning of the statute and leave the discretion to enhance damages in the capable hands of the district courts." *Id.* at 1377, 1381.

More recently, four other members of the Federal Circuit have recognized that the Federal Circuit's interpretation of § 284 has gone seriously awry. *See Halo*, 780 F.3d at 1359 (Taranto, J., joined by Reyna, J., concurring) ("To begin with, there are fundamental questions about the substantive standards. One is whether willfulness should remain a necessary condition for enhancement under § 284's 'may' language . . . ."); [2] *id.* at 1362–63 (O'Malley, J., joined by Hughes J., dissenting) ("Because § 284 also places the inquiry squarely within a trial court's discretion, we should rethink the extent to which we are authorized to impose restrictions on the manner

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[2] The Federal Circuit issued its order denying Halo's petition for rehearing *en banc* on the same day as its order denying Stryker's *en banc* petition. As Judge Taranto noted in *Halo*, the issues presented there were narrower and did not raise the basic question of whether an absolute willfulness requirement should be grafted onto § 284 in the first place. *See Halo*, 780 F.3d at 1358 (Taranto, J., joined by Reyna, J., concurring). Stryker's petition for rehearing *en banc*, on the other hand, squarely raised the issue.

in which that discretion is exercised, outside the normal restrictions imposed by the Federal Rules of Evidence and application of the abuse of discretion standard. We should now assess whether a flexible test similar to what we have been told to apply in the § 285 context is also appropriate for an award of enhanced damages."). Yet despite recognition from a number of Federal Circuit judges that the court's restrictions on § 284 enhanced damages are misplaced, the Federal Circuit appears unwilling to remedy the situation, having rejected the opportunity to reconsider the issue, including in this case. *Certiorari* is required to return to district courts the discretion conferred by Congress to award enhanced damages in appropriate circumstances.

II. THE *SEAGATE* FRAMEWORK FOR WILLFULNESS CANNOT STAND

At a minimum, the Federal Circuit's existing willfulness framework is impermissibly rigid and unduly hinders patent owners' ability to secure enhanced damages, even in the face of flagrant, bad-faith infringement. Congress could not have intended the deterrent effect of enhanced damages to be diluted by a burdensome willfulness framework.

A. *Seagate* Undermines The Deterrent Power Of Enhanced Damages

The prospect of enhanced damages is meant, at the very least, to dissuade would-be infringers

from copying patented inventions. Innovators like Stryker commonly spend years and invest enormous sums of money developing pioneering inventions. The ability to recover enhanced damages for patent infringement serves as an added assurance that a patentee's investment will be protected from wholesale copying, especially by direct competitors.

But the existing *Seagate* framework dilutes this intended deterrent effect of § 284. As happened here, infringers who have knowingly copied a patented invention can defeat willfulness and enhanced damages so long as their appellate counsel is able to convince the Federal Circuit of the mere plausibility of their defenses on appeal under the court's *de novo* review. Ordinarily, competent defense counsel can easily devise at least one minimally "reasonable" defense for litigation, particularly since it is already understood that a reasonable defense in the enhanced damages context is something less than a winning one. *See, e.g.*, *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319–20 (Fed. Cir. 2010). Indeed, the Federal Circuit regularly affirms on validity but reverses on willfulness based on an adjudged infringer's "reasonable belief of patent invalidity." *See, e.g.*, App. 21a-24a; *Innovention Toys, LLC v. MGA Entm't, Inc.*, No. 2014-1731, 2015 WL 1917997, at *6 (Fed. Cir. Apr. 29, 2015); *Spine Solutions*, 620 F.3d at 1319–20. Under current law, the presumption of patent validity under 35 U.S.C. § 282(a) does not even come into play when considering the objective reasonableness of an invalidity defense. As such, objective reasonableness

is a very low threshold for an infringer to meet.

In stark contrast, patentees shoulder a far more onerous burden in showing that a defendant has proffered no objectively reasonable defenses, especially when this must be demonstrated by clear and convincing evidence. Indeed, as happened in this case, infringers can strategically select willfulness defenses for appeal that were not presented in district court proceedings, thereby rendering the district court's analysis incomplete and making it seem as though the district court failed to review the objective reasonableness of the infringer's specific defenses. *Compare* App. 73a-79a, *with* App. 21a-24a. So long as an infringer can present a minimally reasonable, *post-hoc* defense, district courts are categorically precluded from taking bad faith into account or considering enhanced damages. This situation is unfair to patentees who have invested in innovation, and Congress could not have intended that § 284 would be gutted of its deterrent power in this way.

B. *Seagate* Has Created An Artificial And Unmanageable "Evidentiary Wall"

Willfulness under *Seagate* does not carry its ordinary meaning. Willfulness speaks to the "will"—the state of mind—of the infringer. Starting with *Seagate*, however, the Federal Circuit has required patentees prove what it calls "objective" willfulness by clear and convincing evidence before the

factfinder may consider any evidence of subjective willfulness. *See, e.g.*, *Powell*, 663 F.3d at 1236. Consequently, even in cases involving significant evidence of bad faith (like this one), district courts must completely ignore any such evidence in determining whether an infringer's conduct was objectively willful. This "evidentiary wall . . between the objective and subjective portions of the inquiry . . . preclude[s] considerations of subjective bad faith—no matter how egregious—from informing [the] inquiry of the objective baselessness of a claim and preclude[s] the weakness a claim or defense from being indicative of a parties' [*sic*] subjective bad faith." *Halo*, 780 F.3d at 1362 (O'Malley, J., joined by Hughes, J., dissenting); *see also Global Traffic*, 2015 WL 3513416, at *7 (reversing willfulness finding because the district court considered the "ample evidence" of the accused infringers' knowledge of the patent in assessing *Seagate*'s objective prong).

This objective/subjective distinction is not only unduly restrictive, but it is also an "artificial and awkward construct" that causes confusion and is easily misapplied. *Halo*, 780 F.3d at 1362 (O'Malley, J., joined by Hughes, J., dissenting). Infringement does not occur in a vacuum; rather, a particular party infringes a particular patent under particular circumstances. In this case, for example, Zimmer admitted copying Stryker's product, knowing that it was patented. The objective reasonableness of Zimmer's defenses, to the extent relevant, thus should have been evaluated in light of Zimmer's admitted copying. Under the Federal Circuit's

existing willfulness framework, however, the objective inquiry was performed without considering Zimmer's bad faith or actual reliance on its proffered defenses.

Indeed, "subjective" considerations often are quite relevant to objective ones. Only nonobvious inventions can be patented, for instance, and it is well-established that copying constitutes objective evidence of nonobviousness. Yet because copying itself seems like a subjective consideration, courts have often ignored it in considering objective willfulness. Indeed, that appears to be what the Federal Circuit did here. Theoretically, perhaps, this should not happen, but the rigid and artificial distinction *Seagate* creates makes such mistakes common.

This result is incompatible with the principles this Court articulated for exceptional case determinations under § 285, where "a case presenting *either* subjective bad faith *or* exceptionally meritless claims may sufficiently set itself apart from mine-run cases to warrant a fee award." *Octane Fitness*, 134 S. Ct. at 1757 (emphasis added). Given that § 284 imposes even fewer constraints on district courts' discretion than § 285, courts should be entitled to weigh objective and subjective considerations as appropriate under the circumstances in assessing willfulness, just as they are entitled to do in assessing exceptional case. Presently, however, the Federal Circuit's willfulness framework is driven almost entirely by objective considerations reviewed in a vacuum.

The Federal Circuit purportedly relied on this Court's decision in *Safeco Insurance Co. of America v. Burr*, 551 U.S. 47 (2007), which dealt with "willful" violations of the Fair Credit Reporting Act, as the basis for *Seagate*'s evidentiary wall. In *Safeco*, this Court rejected the argument that "evidence of subjective bad faith can support a willfulness finding" where a party had adopted an "objectively reasonable" reading of the statute. *Id.* at 70 n.20. The Court explained that "Congress could not have intended [liability for willfulness] for those who *followed* an interpretation that could reasonably have found support in the courts, whatever their subjective intent may have been." *Id.* (emphasis added). The Court thus considered whether the accused willful parties *actually* operated under an objectively reasonable interpretation of the statute *at the time of their disputed conduct*, not whether they devised that reasonable interpretation after the fact.

Over time, the Federal Circuit has expanded the *Seagate* test to permit reasonable *post-hoc* defenses to preclude a finding of willfulness, regardless of whether the infringer was aware of those defenses prior to engaging in infringement. *Compare i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 860 (Fed. Cir. 2010) ("Based on its own assessment of the evidence and Microsoft's defenses, the jury was free to decide for itself whether Microsoft reasonably believed there were any substantial defenses to a claim of infringement."), *with* App. 21a-24a; *Global Traffic*, 2015 WL 3513416, at *7; *Halo*, 769 F.3d at 1382. This is inconsistent with *Safeco*, which presumed that the defendant

adopted an "objectively reasonable" reading of the statute prior to engaging in the disputed conduct. *See* 551 U.S. at 70 n.20.

C. *Seagate* Improperly Strips District Courts Of Discretion

Even if willfulness is properly a prerequisite for enhanced damages in patent cases, district courts should have discretion to consider all relevant evidence—objective, subjective, or anything in between—in making willfulness determinations, and to weigh that evidence accordingly. *Accord Octane Fitness*, 134 S. Ct. at 1757 ("[A] case presenting either subjective bad faith or exceptionally meritless claims may sufficiently set itself apart from mine-run cases to warrant a fee award."); *see also Knorr-Bremse*, 383 F.3d at 1347 ("[P]recedent . authorizes the trier of fact to accord each factor the weight warranted by its strength in the particular case. We deem this approach preferable to abstracting any factor for per se treatment, for this greater flexibility enables the trier of fact to fit the decision to all of the circumstances.").

The Federal Circuit has already devised a multi-factor, discretionary test for enhanced damages that accounts for the relevant willfulness considerations. Under existing Federal Circuit jurisprudence, the so-called *Read* test comes into play only after willfulness has been found and the district court is considering whether and by how

much to enhance damages. *See Read*, 970 F.2d at 826–28. In *Read*, the Federal Circuit noted that "[t]he paramount determination in deciding to grant enhancement and the amount thereof is the egregiousness of the defendant's conduct based on all the facts and circumstances." *Id.* at 826. The Federal Circuit then articulated a list of factors for district courts to consider in deciding whether to enhance damages. *See id.* at 827. These include:

1. "[W]hether the infringer deliberately copied the ideas or design of another."
2. "[W]hether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed."
3. "[T]he infringer's behavior as a party to the litigation."
4. "[D]efendant's size and financial condition."
5. "Closeness of the case."
6. "Duration of [the] defendant's misconduct."
7. "Remedial action by the defendant."
8. "Defendant's motivation for harm."
9. "Whether defendant attempted to conceal its misconduct."

Id. The Federal Circuit acknowledged that consideration of these factors was "in line with punitive damages considerations in other tort contexts." *Id.* at 827–28.

The *Read* test allows district courts to consider both objective and subjective factors under the totality of the circumstances. Moreover, the *Read* test accounts for situations where enhanced damages might be inappropriate because an infringer had, in good faith, espoused an objectively reasonable defense *before* knowingly copying a patented invention. *See id.* at 827. The test also gives district courts discretion to decide how much to enhance damages, thereby allowing courts to fashion an award commensurate with the infringer's degree of culpability. *See id.* at 828. Applying the *Read* test for enhancement in the first instance would better ensure that infringers are spared from enhanced damages when they proactively investigate known infringement risks, but not when they copy first in bad faith and concoct "reasonable" defenses later.

D. Willfulness Should Be Reviewed With Deference To The Factfinder

The Federal Circuit's rigid framework governing enhanced damages awards impermissibly constrains the discretion that the Patent Act gives district courts in numerous respects and represents an unjustified attempt to control their decision-making at the appellate level. This increase in constraints on district court authority has been

accompanied by a complementary development in the standard by which district court decisions are reviewed. The Federal Circuit now engages in *de novo* review of district court findings on objective willfulness, notwithstanding a district court's greater familiarity with the case, proximity to evidence and experts, and ability to assess the overall picture on questions like validity and infringement. *See Bard*, 682 F.3d at 1007. Regardless of whether *Seagate* is the proper threshold for enhanced damages, the objective prong should still be reviewed with deference. For many of the same reasons this Court last term rejected *de novo* review of exceptional case determinations under § 285 and instead imposed an abuse-of-discretion standard, *see Highmark*, 134 S. Ct. at 1748–49, appellate review of district court findings on willfulness should be deferential.

Like § 285 exceptional case determinations, objective willfulness determinations require the district court to evaluate the strength and reasonableness of a party's litigating positions. *See Octane Fitness*, 134 S. Ct. at 1756; *Lee v. Mike's Novelties, Inc.*, 543 F. App'x 1010, 1017 (Fed. Cir. 2013) (finding no objective willfulness where evidence on infringement was "close"); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1336–37 (Fed. Cir. 2009) (finding no willfulness where defendant "presented a substantial question of noninfringement under the doctrine of equivalents"). Indeed, many of the same considerations will likely factor into both the district court's objective willfulness and exceptional case analyses. These analyses benefit from the district court's long-term,

in-depth familiarity with the parties and issues in a given case. In contrast, the Federal Circuit's exposure to a case is limited to reviewing the parties' briefing and conducting a single oral argument. It makes little sense (and could lead to conflicting, even absurd, results) to allow the Federal Circuit to review the same set of considerations once with deference for purposes of exceptional case and again *de novo* for purposes of willfulness.

The judges of the Federal Circuit disagree over the proper standard of review for objective willfulness. Several judges have criticized the use of *de novo* review of objective willfulness. *See, e.g.*, *Halo*, 780 F.3d at 1361–64 (O'Malley, J., joined by Hughes, J., dissenting); *Halo*, 769 F.3d at 1385–86 (O'Malley, J., joined by Hughes, J., concurring); *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 701 F.3d 1351, 1357 n.1 (Fed. Cir. 2012) (Moore, J., joined by Rader, C.J., O'Malley, J., Reyna, J., Wallach, J., dissenting); *Id.* at 1367 n.5 (Reyna, J., joined by Moore, J., O'Malley, J., Wallach, J., dissenting); *Highmark*, 687 F.3d at 1320–21 (Mayer, J., dissenting-in-part). But as with other aspects of the *Seagate* regime, the Federal Circuit has refused to consider the issue *en banc*. App. 1a-2a (denying petition for rehearing *en banc*); *see also Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, No. 2014-1114 (Fed. Cir. Apr. 8, 2015) (same); *Halo*, 780 F.3d at 1358 (same). Because of the Federal Circuit's exclusive jurisdiction over patent appeals, there will be no opportunity for other circuits to provide guidance on this issue. Given the Federal Circuit's failure to resolve this dispute internally,

this Court should intervene to provide the necessary guidance.

III. THIS CASE SQUARELY PRESENTS AN IMPORTANT ISSUE OF LAW ON WHICH THE SUPREME COURT'S GUIDANCE IS NEEDED

The issues raised in this case are legal ones appropriate for this Court's review. They turn not on complex fact-finding but on the appropriateness of the Federal Circuit's rules for enhanced damages in light of the statutory text and the principles this Court has announced in parallel patent law contexts. At issue is a body of law that has, over the last eight years, progressively moved away from its statutory foundation.

A number of judges on the Federal Circuit have repeatedly called attention to the problems raised by *Seagate* and its progeny, but the court as a whole has been unwilling to revisit the issue and appears from its record in cases like this simply to oppose the policy reflected in the statute allowing for such awards. The statute is open-ended, yet this Court has never opined on the considerations that should be brought to bear in making enhanced damages awards. This Court's guidance is needed.

These issues implicate the basic deterrent and compensatory aims of the patent system. Enhanced damages need not be awarded routinely to be effective, but they must clearly be available in cases

of bad faith.

Undoubtedly, the provisions of the Patent Act can be abused by vexatious litigants pressing weak claims. But they can also be abused by unscrupulous copyists determined to profit from the inventions of another. This is a case involving patents held by a pioneering inventor, infringement by a direct competitor, and copying of inventions known to be patented. It is far removed from the concerns voiced in other contexts about patent "trolls." It involves the core concerns of the patent system and the principles essential to its basic operation.

In recent years, this Court has repeatedly rejected the Federal Circuit's attempt to impose rigid and mechanical rules in various areas of patent law. *See, e.g.*, *Octane Fitness*, 134 S. Ct. at 1756 (attorneys' fees); *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 835 (2015) (claim construction); *Bilski v. Kappos*, 561 U.S. 593, 604 (2010) (patentable subject matter); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415 (2007) (obviousness). Enhanced damages represents another area in which the Federal Circuit has gone astray, especially in light of the broad and flexible language of § 284.

CONCLUSION

For all the foregoing reasons, the petition for a writ of *certiorari* should be granted.

Respectfully submitted,

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June 2015

APPENDIX

APPENDIX A — DENIAL OF REHEARING IN THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, DATED MARCH 23, 2015

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., STRYKER SALES CORPORATION,

Plaintiffs-Appellees,

v.

ZIMMER, INC., ZIMMER SURGICAL, INC.,

Defendants-Appellants,

ZIMMER ORTHOPAEDIC SURGICAL PRODUCTS,

Defendant.

2013-1668

Appeal from the United States District Court for the Western District of Michigan in No. 10-CV-1223, Judge Robert J. Jonker.

ON PETITION FOR REHEARING EN BANC

Before PROST, *Chief Judge*, NEWMAN, LOURIE, DYK, MOORE, O'MALLEY, REYNA, WALLACH, TARANTO, CHEN, and HUGHES, *Circuit Judges.*

PER CURIAM.

Appendix A

ORDER

Appellees Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation filed a petition for rehearing en banc. A response to the petition was invited by the court and filed by appellants Zimmer, Inc. and Zimmer Surgical, Inc. Leave to file a reply was granted, and a reply was filed by the appellees. The petition was initially referred to the panel that heard the appeal. In a separate order issued today, the panel withdrew the opinion and replaced it with a revised opinion.

The petition, response, reply, and revised opinion were referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

(1) The petition for rehearing en banc is denied.

(2) The mandate of the court will issue March 30, 2015.

March 23, 2015
Date

FOR THE COURT

/s/ Daniel E. O'Toole
Daniel E. O'Toole
Clerk of Court

APPENDIX B — OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, FILED MARCH 23, 2015

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

2013-1668

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., STRYKER SALES CORPORATION,

Plaintiffs-Appellees,

v.

ZIMMER, INC., ZIMMER SURGICAL, INC.,

Defendants-Appellants,

ZIMMER ORTHOPAEDIC SURGICAL PRODUCTS,

Defendant.

March 23, 2015, Decided

Appeal from the United States District Court for the Western District of Michigan in No. 10-CV-1223, Judge Robert J. Jonker

Before PROST, *Chief Judge*, NEWMAN and HUGHES, *Circuit Judges.*

PROST, *Chief Judge.*

Appendix B

Zimmer, Inc., Zimmer Surgical, Inc., and Zimmer Orthopaedic Surgical Products (collectively "Zimmer") appeal from the final judgment of the United States District Court for the Western District of Michigan that U.S. Patent Nos. 6,022,329 ("'329 patent"), 6,179,807 ("'807 patent"), and 7,144,383 ("'383 patent") were valid and willfully infringed. For the reasons stated below, we affirm the jury's findings that the patents were valid and infringed, and the jury's award of damages to plaintiff-appellees Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation (collectively "Stryker"). However, we reverse the district court's judgment that Zimmer's infringement was willful, and, accordingly, we vacate its award of treble damages. Finally, we vacate and remand the district court's finding of exceptional case and its award of attorneys' fees.

I

The patents at issue concern pulsed lavage devices. Pulsed lavage devices deliver pressurized irrigation for certain medical therapies, including orthopedic procedures and cleaning wounds. The particular devices at issue in this case are portable, battery powered, and handheld. They include both suction and discharge tubes, so they both spray fluid from an external source and also suction off fluid and debris. These devices represent an improvement over older pulsed lavage systems that required a central power source and external mechanical pumps, which meant that they needed to be wheeled around the hospital.

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Stryker and Zimmer are the two main competitors in the orthopedic pulsed lavage device market. Stryker began bringing battery-powered, handheld pulsed lavage devices to the marketplace in 1993. That same year, Stryker filed the application which eventually gave rise to the patents at issue. In February 2000, the first of these patents, the '329 patent, issued. Later that year Stryker sued another manufacturer, Davol Inc., for infringement. That suit settled in 2001, and Davol took a license on the '329 patent. The '807 patent subsequently issued in January 2001, and the '383 patent issued in December 2006.

Zimmer introduced its first portable pulsed lavage device, the Var-A-Pulse, in 1996. In 1998, Zimmer began to develop a new design, which came to market soon thereafter as the Pulsavac Plus range of products. Zimmer's Pulsavac Plus products achieved a peak of $55 million in annual sales in late 2007, before they were withdrawn from the marketplace due to a product recall, after which sales resumed in December 2008.

In 2010, Stryker sued Zimmer, alleging that Zimmer's Pulsavac Plus devices infringed various claims of the '329, '807, and '383 patents. The district court granted partial summary judgment in favor of Stryker, finding infringement of the '807 and '383 patents' asserted claims. The question of whether Zimmer infringed the single asserted claim of the '329 patent, as well as Zimmer's invalidity defenses against all of the asserted claims, went to trial. The jury found that the products infringed claim 2 of the '329 patent and that all the asserted claims were valid. The jury also awarded $70 million in lost profits.

It further found that Zimmer had willfully infringed all three patents. The jury also found that Stryker had marked substantially all of its products that commercially embodied the patents in suit during the period it sought damages, pursuant to 35 U.S.C. § 287(a).

In August 2013, the district court issued an order rejecting Zimmer's motions for judgment as a matter of law ("JMOL") on various issues, affirming the jury's verdict, awarding trebled damages for willful infringement, finding an exceptional case and thus awarding attorneys' fees to Stryker, and imposing a permanent injunction. The district court subsequently entered final judgment pursuant to its order.

Zimmer appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II

We turn first to Zimmer's appeal on the issues of claim construction, infringement, and validity.

Claim construction is an issue of law that we review *de novo*. *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272, 1276-77 (Fed. Cir. 2014) (*en banc*). In construing a claim term, we look at the term's plain and ordinary meaning as understood by a person of ordinary skill in the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). There is an exception to this general rule when a patentee sets out a definition and acts as her own lexicographer. *Thorner v.*

Sony Computer Entm't Am., LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Infringement is a question of fact. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1309 (Fed. Cir. 2009). Invalidity by reason of anticipation under 35 U.S.C. § 102 is a question of fact. *Atlas Powder Co. v. Ireco, Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999). Invalidity by reason of obviousness under 35 U.S.C. § 103 is a legal conclusion based on underlying facts. *Allergan, Inc. v. Sandoz Inc.*, 726 F.3d 1286, 1290 (Fed. Cir. 2013). Zimmer has the burden to prove invalidity by clear and convincing evidence. *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 736 (Fed. Cir. 2013).

On the issues of infringement and validity that the jury decided, Zimmer appeals the district court's denials of its motion for JMOL. Generally, a district court grants JMOL and sets aside the jury's verdict if it "finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50(a). We apply the law of the regional circuit to our review of the district court's grant or denial of a motion for JMOL. *ClearValue, Inc. v. Pearl River Polymers, Inc.*, 668 F.3d 1340, 1343 (Fed. Cir. 2012). The Sixth Circuit reviews the district court's decision on a motion for JMOL *de novo*. *Barnes v. City of Cincinnati*, 401 F.3d 729, 736 (6th Cir. 2005). "Judgment as a matter of law may only be granted if, when viewing the evidence in a light most favorable to the non-moving party, giving that party the benefit of all reasonable inferences, there is no genuine issue of material fact for the jury, and reasonable minds could come to but one conclusion in favor of the moving party." *Id.*

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For the reasons stated below, we affirm the district court's judgment on the various defenses of non-infringement and invalidity that Zimmer raises across the three asserted patents. However, we also find that each of these defenses was not unreasonable.

The '329 Patent

The only asserted claim of the '329 patent, claim 2, describes features of a "pulsed irrigation surgical handpiece." According to this claim, the handpiece comprises a "hollow housing," which includes a "handle," and, in relevant part in this case, "an electric motor spaced between the top and bottom of said *handle* and located *in said handle*" adjacent to an irrigation tube within the housing. '329 patent col. 22 ll. 5-7 (emphases added). Zimmer contends that this limitation is critical for the purposes of infringement because, as indicated by the arrows below, the motor in its accused Pulsavac Plus device is not located in the handle—rather, it is located in the "nub" of the handpiece, the protrusion behind the barrel.

Appellees' Br. 11 (red arrows added).

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During claim construction, Zimmer took the position that no construction was necessary and that the claim term "handle" could be understood as having its plain and ordinary meaning to a person of ordinary skill in the art. *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2012 U.S. Dist. LEXIS 12329, *12 (W.D. Mich. Feb. 1, 2012), ECF No. 106 ("*Claim Construction Order*"). Stryker proposed to construe the term "handle" as "a portion of a device designed to be held by a hand or hands." *Id.* The district court adopted Stryker's proposed construction.

Stryker argued that nothing in the patent's specification otherwise limited the meaning of "handle," and that its definition for "handle" was consistent with general dictionaries. Zimmer argued that Stryker's express construction of the term, however, was too broad and read out the specification's consistent distinction between the "handle" and "barrel" portions of the claimed device.

The '329 patent generally describes various embodiments, all of which comprise a "hand-held housing having a handle and a barrel which extends from the upper end of the handle." '329 patent col. 3 ll. 28-31. Zimmer further supported its position with the language of claim 4, which depends on claim 2. Claim 4 separately describes both a "handle" and a "barrel," which Zimmer argued meant that the patentee maintained the distinction between the two parts of the handpiece.

However, the district court ultimately agreed with the Stryker that a device that met claim 2 did not need to have a discrete barrel joined to the handle, since this

claim could cover wand-shaped devices that existed in the prior art in which the entire handpiece functioned like a handle and no separate barrel was joined at an angle. The district court reasoned that since claim 4 is a dependent claim, it could cover the pistol-shaped design described in the specification, while claim 2 would more broadly cover wand-shaped devices as well.

On appeal, Zimmer also raises the prosecution history of U.S. Patent Application No. 08/559,133 ("'133 application"), the parent of the application that issued as the '329 patent. During the '133 application's prosecution, Stryker sought to overcome a rejection of claim 39 based on a prior art reference which described a pistol-shaped device with a barrel and a handle. Stryker traversed the rejection by arguing that the motor of the prior art handpiece was "not in the handle or at an angle to the barrel." Zimmer contends that claim 39 included the limitation "locating said motor in said handle," which is the same as the one at issue in the construction of "handle" in claim 2 of the '329 patent. Therefore, Zimmer argues, Stryker's statement disclaimed designs in which the motor is located in the barrel or nub of a pistol-shaped handpiece. *See Gemalto S.A. v. HTC Corp.*, 754 F.3d 1364, 1371 (Fed. Cir. 2014) ("[W]hen multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation."); *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1349 (Fed. Cir. 2004); *Elkay Mfg. Co. v. EBCO Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999).

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Zimmer did not raise its prosecution history argument during its claim construction briefing and the *Markman* hearing before the district court. The district court indicated that it would not alter the claim construction but, nevertheless, determined that it would still consider this argument in deciding Zimmer's motion for summary judgment of non-infringement. *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2012 U.S. Dist. LEXIS 184385, *2 (W.D. Mich. Nov. 29, 2012), ECF No. 248 ("*Summary Judgment Order I*"). The district court nevertheless denied Zimmer's motion, finding that the prosecution disclaimer was insufficiently "clear and unmistakable" because claim 39 of the '133 application had additional limitations that were absent in claim 2 of the '329 patent. *Id.* at 4-5.

The district court's analysis was flawed, however, because this was not a case in which the "purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself)." *Saunders Grp., Inc. v. Comfortrac, Inc.*, 492 F.3d 1326, 1333 (Fed. Cir. 2007).[1] There was no difference in the language

1. The limitation at issue in the original claim 39 of the '133 application was, in full: "a handpiece housing containing said pump and shell, said handpiece housing being elongate [sic] and bent and comprising a handle and a barrel, said barrel being open to and extending forward from an intersection with the top of the handle at an angle thereto, said hollow shell extending lengthwise along and within said handle into said angled intersection of said handle and barrel and *locating said motor in said handle remote from said angled intersection*, said link extending at said angle

describing the limitations as between the two claims at issue, rather, the limitation of claim 2 was included within claim 39. There is no reason why a disclaimer on a limitation within a narrower claim would not apply to the identical limitation within the broader claim, as the same concerns about the prior art would relate to both. *See, e.g.*, *Gemalto*, 754 F.3d at 1371 (applying a common disclaimer to both an independent and narrower dependent claim containing the same term).[2] That said, the district court did not err in rejecting Zimmer's argument as it related to claim construction, while still entertaining it in the context of infringement. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 889-90 (Fed. Cir. 2004) (affirming the district court's construction on the grounds that a proffered alternative construction was untimely raised). Therefore, we review Zimmer's argument only as it relates to infringement.

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from said shell and handle forwardly into and along the length direction of said barrel, said pump movable member extending along the length direction of said barrel and being reciprocatingly driven by said link in said length direction of said barrel." J.A. 16672 (emphasis added).

2. This is unlike the case cited by Stryker and the district court for the contrary proposition, *Middleton, Inc. v. Minnesota Mining and Manufacturing. Co.*, 311 F.3d 1384, 1388-89 (Fed. Cir. 2002), in which the term at issue, "uniform" in the context of floor coverings, would potentially have a different meaning if it applied to the narrower claim—limited to smooth sporting surfaces—and a subsequent, broader claim that contemplated other kinds of surfaces. Here, a limitation on the location of the motor within the handpiece would mean the same thing in the context of either claim.

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Infringement is a question of fact, and we must give a substantial degree of deference to the jury's verdict. At trial, Stryker presented evidence indicating that a medical professional could hold Zimmer's Pulsavac Plus by the nub behind the barrel, where the motor was located. In addition, Stryker presented evidence that the barrel of the Pulsavac Plus was called a "barrel grip" in an associated patent application, and the barrel included indentations that would allow the device to be used while held by the barrel. Stryker also persuaded the jury that it was reasonable to infer that if the nub behind the barrel was also shaped such that it was at least *capable* of being held, then it would be "a portion of the device designed to be held by hand," in accordance with the district court's construction of "handle" in the claim at issue. In light of the evidence presented at trial as a whole, along with the prosecution history, we do not find that "reasonable minds could come to but one conclusion" that Zimmer did not infringe claim 2 of the '329 patent. *Barnes*, 401 F.3d at 736. Accordingly, we affirm, though Zimmer's claim construction and non-infringement positions were not unreasonable.

The '807 Patent

Infringement

Zimmer argues that the district court erred in granting summary judgment of infringement of the '807 patent's asserted claims. We review the district court's grant of summary judgment *de novo*. *Dixon v. Univ. of Toledo*, 702 F.3d 269, 273 (6th Cir. 2012). "Summary

judgment is proper where there exists no issue of material fact and the moving party is entitled to judgment as a matter of law." *ETW Corp. v. Jireh Publ'g, Inc.*, 332 F.3d 915, 920 (6th Cir. 2003) (citing Fed. R. Civ. P. 56(c)). All reasonable factual inferences are drawn in favor of the nonmoving party. *Id.*

Zimmer's argument on appeal centers on whether its products include, as required for all the asserted claims, "a front end for *receiving* the discharge tube and the suction tube." '807 patent col. 27 ll. 35-37 (emphasis added).[3] This limitation describes the interface between the nozzles at the front end of the handpiece and the nozzles of a removable tip that includes discharge and suction tubes. Zimmer argues that the claim language requires that there be male openings on the tip that fit into the female nozzles on the handpiece. Therefore, Zimmer contends that the accused devices do not infringe because they are designed with female openings on the tip that fit into tapered male nozzles on the handpiece. To support its position, Zimmer relies on various dictionary definitions of "receive," which it argues all have some variant of the verbs "to contain" or "to hold." *See* Appellants' Br. 57. Zimmer argues that this meaning is consistent with the specification, which discloses a single embodiment in which the neck of the suction tube "seats in" the drain tube—and, specifically, that this configuration is designed to avoid "leakage of the fluid and material as it flows in the drain tube." '807 patent col. 11 ll. 29-34; *see also* Figure 8.

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3. Stryker asserted claim 45 and certain of its dependent claims.

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As an initial matter, Stryker's argument that Zimmer waived a narrower construction of the term "receive" is unavailing. The parties and the district court directly addressed this issue during the summary judgment proceedings. Moreover, unlike the dispute concerning the meaning of "handle" in the '329 patent, the district court did not note any waiver and expressly considered the scope of "receive" in evaluating whether Zimmer's design infringed. *See Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005) (contemplating "rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves").

Stryker further argues that the specification provides a broader disclosure of "an irrigation handpiece to which complementary tips can be readily *coupled*." '807 patent col. 1 ll. 10-12 (emphasis added); *see also* col. 2 ll. 45-47 (disclosing "a tip assembly [that] readily *seals* to a complementary handpiece") (emphasis added). Stryker also points to Zimmer's own lay witnesses, who admitted that its Pulsavac Plus handpiece "receives" the tips.[4]

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4. Stryker also argues that Zimmer's invalidity argument relies on the prior art Var-A-Pulse device including the "receive" limitation—even though it has the same kind of tip assembly as the Pulsavac Plus. We note, however, that nothing precludes Zimmer from arguing for a narrower application of the limitation on the infringement context, while also arguing, in the alternative, that—if the district court were to disagree—the patent claim would be so broad as to be invalid.

The district court noted that, in its view, "Zimmer's reading of 'receive' is artificially narrow." *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2012 U.S. Dist. LEXIS 184383, *15 (W.D. Mich. Nov. 29, 2012), ECF No. 247 ("*Summary Judgment Order II*"). Instead, the district court reasoned that "[t]he word "receives" in this context can only mean that one part of the device connects directly with another part of the device." *Id.* Thus, the district court found that Zimmer infringed. While it is a close case, we do not find that the district court erred in granting summary judgment of infringement based on the record before it.

Invalidity

Zimmer also appeals the district court's holding that the asserted claims of the '807 patent were anticipated by its prior art Var-A-Pulse device, the predecessor of the Pulsavac Plus. Stryker argues that the Var-A-Pulse device does not anticipate because it is missing the "lock assembly" limitation of the asserted claims, which require that there be "a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube to said body." '807 patent col. 27 ll. 35-37. The district court adopted Stryker's proposed construction of the term "lock assembly" as "components that work together to secure or fasten the tip to the hand-piece." *Claim Construction Order* at 16. In the Var-A-Pulse device, the tip was attached to the handpiece in such a way that the tip nozzles fit into interior housing grooves at the front of the handpiece, which were then held together by friction. Zimmer argues that under the district court's construction, the limitation was present in the prior art

because the nozzles were "secured or fastened" when they were fit in the interior housing groove.

At trial, Zimmer presented evidence that included the Var-A-Pulse's technical documentation, which indicated that the tip should be "secured" to the handpiece, as well as testimony from various Stryker witnesses admitting that the tip nozzles were fastened to the handpiece when they were inserted. Stryker argued that, unlike the accused Pulsavac Plus devices, which include a locking ring to secure the tip, there is no separate part or assembly in the Var-A-Pulse. Stryker also contended the prior art device did not include the full claim limitation, which requires that the lock assembly be "mounted" to the front end of handpiece. Stryker argued that because Zimmer identified a "lock assembly" that itself included the housing groove that is part of the front end, Zimmer was essentially arguing that the lock assembly was mounted to itself, thus nullifying the limitation. Stryker also presented evidence to the jury showing that the Var-A-Pulse tips readily fell off the front end of the handpiece, and that this led the development of the locking ring in the Pulsavac Pulse.

The jury ultimately found that there was no clear and convincing evidence that the Var-A-Pulse device anticipated the '807 patent's asserted claims. In light of the evidence that was presented, we find that a reasonable jury could have reached this verdict. Accordingly, we affirm.

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The '383 Patent

At trial, Zimmer argued that the asserted claims of the '383 patent were obvious at the time of the invention in light of U.S. Patent No. 5,046,486 ("Grulke"), U.S. Patent No. 4,817,599 ("Drews II"), and U.S. Patent No. 5,350,356 ("Bales"). Zimmer contends that all of the limitations of the '383 patent's asserted claims were collectively present in the prior art references. Stryker does not directly dispute this point. Instead, it principally argues that because the designs claimed by Grulke and Drews II each exclude certain components described in the claims, one of ordinary skill in the art would not have been motivated to combine these references. In brief, Grulke disclosed a pulsed lavage system that uses a pneumatic, rather than an electric, motor. Drews II disclosed a pulsed irrigation system, powered by an electric motor, that is used as an eye wash.

At trial, Zimmer argued that it would have been obvious to one of ordinary skill to try to replace the pneumatic motor of Grulke with the electric motor in Drews II. Zimmer further argued that any reconfiguration of Grulke to accommodate an electric motor could be done by one of ordinary skill. *See In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1382 (Fed. Cir. 2007) ("[W]e do not ignore the modifications that one skilled in the art would make to a device borrowed from the prior art."). Zimmer also argued that even though the Grulke reference was directed to orthopedic pulsed lavage systems, and the Drews II reference was directed to eyewash systems, they both described pressured water irrigation in hospitals and

clinics. Zimmer contended that that a person of ordinary skill in the art of pulsed lavage devices would thus be aware of the art in both fields and would be motivated to combine features from each of them. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007) ("Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.").

Zimmer also presented evidence of the examiner's rejection of certain claims in Stryker's prosecution of U.S. Patent Application No. 11/563,504 ("'504 application"), a continuation of the '383 patent, which occurred during the discovery phase of this case. During that patent application's prosecution, the examiner issued a non-final office action, rejecting certain claims of the '504 application as obvious over Grulke "and further in view of Drews II." J.A. 17226. Stryker did not attempt to traverse the rejection and instead ultimately abandoned the application. Stryker principally argued that because the claim at issue in the '504 application included certain different limitations, the examiner's rejection did not have any relevance to the '383 patent's claims. We note, however, that the difference in the detail of the claims is immaterial as to whether it would have been obvious to combine Grulke and Drews II. While persuasive, the examiner's proffered rejection is not on its own dispositive, in large part because the U.S. Patent and Trademark Office ("PTO") and district courts "take different approaches in determining invalidity and on the same evidence could

quite correctly come to different conclusions." *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1428 (Fed. Cir. 1988).

Stryker also argued that the Grulke device differed substantially from the Drews II device. For example, it was designed for surgery rather than eyewashing. Grulke also disclosed a large device that was wheeled into an operating room that had many components that differed from those in the portable device disclosed Drews II. Stryker presented expert testimony rebutting Zimmer's evidence that it would have been obvious to combine these references.

On the basis of the record presented at trial, we agree with the district court that a reasonable jury could conclude that one of ordinary skill in the art would not have been motivated to combine the Grulke and Drews II references, even in light of the examiner's rejection of related claims on the basis of this combination. This is sufficient to affirm the district court's determination that Zimmer did not show, by clear and convincing evidence, that the '383 patent's claims were obvious.

For this reason, we need not reach other issues, including the evidence of secondary considerations of non-obviousness. Therefore, we affirm the district court's determination that the '383 patent's asserted claims were not obvious over the combination of Grulke, Drews II, and Bales.[5]

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5. Zimmer also appeals the jury's finding that Stryker's products were sufficiently marked by the '383 patent during part

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III

Willful Infringement

To establish willful infringement, the patentee has the burden of showing "by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent." *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (*en banc*). "The state of mind of the accused infringer is not relevant to this objective inquiry." *Id.* Only if the patentee establishes this "threshold objective standard" does the inquiry then move on to whether "this objectively-

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of the period for which it sought damages. We need not reach this issue, because we affirm the finding that Zimmer infringed the '807 and '329 patents, which is sufficient to support all of Stryker's award of damages for lost profit. However, we note that the jury was indeed incorrectly instructed that it should consider "whether some portion of the Stryker products not marked with a particular patent number were marked with other *related patent* notices." *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2013 U.S. Dist. LEXIS 171817, *32 (W.D. Mich. Aug. 7, 2013), ECF No. 537 ("*Post-Verdict Order*") (emphasis added). Because of this instruction, the jury could have been misled to consider a product marked with the number of a patent related to the '383 patent—but not with the '383 patent number itself—as being sufficiently marked. While the district court appears to have relied on cases that suggest that there is some flexibility in what constitutes sufficient marking, the statute is not so broad as to allow marking with a different patent—with different claims—to provide sufficient notice to the public. Rather, the plain language of the marking statute provides that the patented article be marked with the "number of *the* patent." 35 U.S.C § 287(a) (emphasis added).

defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer." *Id.* We have held that objective recklessness, even though "predicated on underlying mixed questions of law and fact, is best decided by the judge as a question of law subject to *de novo* review."[6] *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1007 (Fed. Cir. 2012). Objective recklessness will not be found where the accused infringer's "position is susceptible to a reasonable conclusion of no infringement." *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1310 (Fed. Cir. 2011).

The district court failed to undertake an objective assessment of Zimmer's specific defenses to Stryker's claims. Instead, the district court's analysis of objective reasonableness summarily asserted that the "jury heard testimony" that Zimmer "all but instructed its design team to copy Stryker's products." *Post-Verdict Order*, 2013 U.S. Dist. LEXIS 171817 at *40. The district court further concluded that the "pioneering" nature of Stryker's inventions and the secondary considerations of

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6. This court has not yet addressed whether *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 188 L. Ed. 2d 816 (2014), or *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1746, 188 L. Ed. 2d 829 (2014), altered the standard of review under which this court analyzes the objective prong of willfulness. However, as the district court failed to undertake any objective assessment of Zimmer's specific defenses, the district court erred under any standard of review and thus this court need not now address what standard of review is proper regarding the objective prong of willfulness.

non-obviousness "made it dramatically less likely that Zimmer's invalidity arguments were reasonable." *Id.*

An objective assessment of the case shows that Zimmer presented reasonable defenses to all of the asserted claims of Stryker's patents.

First, with respect to the '329 patent, the motor in the Zimmer's Pulsavac Plus is located in the nub at the rear of the barrel of its pistol-shaped device. Stryker's infringement case relied on first persuading the district court to broadly construe the claim term "handle" to include the barrel of a pistol-shaped device—even though the patent specification only describes the handle and barrel separately. Then, Stryker had to persuade the jury that the barrel nub was a part of the device "designed to be held by hand," even in light of prosecution history in which Stryker distinguished between the location of the motor in the handle as opposed to the barrel. Though Stryker ultimately prevailed, Zimmer's arguments were not unreasonably founded on the plain meaning of "handle" in the context of a pistol-shaped device, the specification's exclusive disclosure of pistol-shaped devices, and the prosecution history—all on which it could have relied to provide notice of what the patent claims covered.

Second, with respect to the '807 patent, the specification only disclosed female nozzles on the front end of the device and male nozzles on the removable tip, which would be consistent with the claim requiring that the front end "receive" the tip. Zimmer's devices had the exact opposite configuration: tapered male nozzles on the front end and

female nozzles on the tip. Furthermore, the prior art Var-A-Pulse devices included all of the asserted claims' limitations except one. In light of the district court's claim construction, Stryker's defense to Zimmer's argument relied on persuading the jury that even though the tip's nozzles could fit into the handpiece and be held in place through friction with internal housing grooves, that did not mean they were "secured or fastened." Again, though Stryker prevailed, Zimmer's defenses were not unreasonable.

Third, with respect to the '383 patent, Zimmer's obviousness argument relied on a combination of references that was also raised by a PTO examiner during Stryker's prosecution of a related patent application—in an office action that occurred during discovery in this litigation. Zimmer's reliance on this combination was not without reason, in particular since the references related to pressured water irrigation systems used in hospitals and clinics. Therefore, even if Zimmer's defenses failed at trial, it still made a reasonable case that the '383 patent's asserted claims were obvious and thus invalid.

In sum, we find that Zimmer's defenses to the infringement of each patent claim that Stryker asserted were not objectively unreasonable, and, therefore, it did not act recklessly.

Attorneys' Fees

As the court reversed the district court's determination of willful infringement, and the district court's award of

attorneys' fees was based on that determination, we vacate the district court's grant of attorneys' fees. However, because there exist further allegations of litigation misconduct in this case and because the standard for finding an exceptional case has changed since the district court issued its finding regarding attorneys' fees, we remand this issue for further consideration by the district court.

IV

For the aforementioned reasons, we affirm the jury's verdict of infringement and validity of all three patents at issue, as well as its award of lost profits. However, we reverse the district court's determination of willful infringement and thus vacate its award of trebled damages. We also vacate and remand the district court's finding of an exceptional case and its award of attorneys' fees. The case is remanded for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, REVERSED-IN-PART, VACATED-IN-PART, AND REMANDED

APPENDIX C — OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, FILED DECEMBER 19, 2014

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

2013-1668

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., AND STRYKER SALES CORPORATION,

Plaintiffs-Appellees,

v.

ZIMMER, INC. AND ZIMMER SURGICAL, INC.,

Defendants-Appellants,

and

ZIMMER ORTHOPAEDIC SURGICAL PRODUCTS,

Defendant.

Appeal from the United States District Court for the Western District of Michigan in No. 10-CV-1223, Judge Robert J. Jonker

Decided: December 19, 2014

Before PROST, *Chief Judge*, NEWMAN and HUGHES, *Circuit Judges.*

PROST, *Chief Judge.*

Appendix C

Zimmer, Inc., Zimmer Surgical, Inc., and Zimmer Orthopaedic Surgical Products (collectively "Zimmer") appeal from the final judgment of the United States District Court for the Western District of Michigan that U.S. Patent Nos. 6,022,329 ("'329 patent"), 6,179,807 ("'807 patent"), and 7,144,383 ("'383 patent") were valid and willfully infringed. For the reasons stated below, we affirm the jury's findings that the patents were valid and infringed, and the jury's award of damages to plaintiff-appellees Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation (collectively "Stryker"). However, we reverse the district court's judgment that Zimmer's infringement was willful, and, accordingly, we vacate its award of treble damages. Finally, we vacate and remand the district court's finding of exceptional case and its award of attorneys' fees.

I

The patents at issue concern pulsed lavage devices. Pulsed lavage devices deliver pressurized irrigation for certain medical therapies, including orthopedic procedures and cleaning wounds. The particular devices at issue in this case are portable, battery powered, and handheld. They include both suction and discharge tubes, so they both spray fluid from an external source and also suction off fluid and debris. These devices represent an improvement over older pulsed lavage systems that required a central power source and external mechanical pumps, which meant that they needed to be wheeled around the hospital.

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Stryker and Zimmer are the two main competitors in the orthopedic pulsed lavage device market. Stryker began bringing battery-powered, handheld pulsed lavage devices to the marketplace in 1993. That same year, Stryker filed the application which eventually gave rise to the patents at issue. In February 2000, the first of these patents, the '329 patent, issued. Later that year Stryker sued another manufacturer, Davol Inc., for infringement. That suit settled in 2001, and Davol took a license on the '329 patent. The '807 patent subsequently issued in January 2001, and the '383 patent issued in December 2006.

Zimmer introduced its first portable pulsed lavage device, the Var-A-Pulse, in 1996. In 1998, Zimmer began to develop a new design, which came to market soon thereafter as the Pulsavac Plus range of products. Zimmer's Pulsavac Plus products achieved a peak of $55 million in annual sales in late 2007, before they were withdrawn from the marketplace due to a product recall, after which sales resumed in December 2008.

In 2010, Stryker sued Zimmer, alleging that Zimmer's Pulsavac Plus devices infringed various claims of the '329, '807, and '383 patents. The district court granted partial summary judgment in favor of Stryker, finding infringement of the '807 and '383 patents' asserted claims. The question of whether Zimmer infringed the single asserted claim of the '329 patent, as well as Zimmer's invalidity defenses against all of the asserted claims, went to trial. The jury found that the products infringed claim 2 of the '329 patent and that all the asserted claims were valid. The jury also awarded $70 million in lost profits.

It further found that Zimmer had willfully infringed all three patents. The jury also found that Stryker had marked substantially all of its products that commercially embodied the patents in suit during the period it sought damages, pursuant to 35 U.S.C. § 287(a).

In August 2013, the district court issued an order rejecting Zimmer's motions for judgment as a matter of law ("JMOL") on various issues, affirming the jury's verdict, awarding trebled damages for willful infringement, finding an exceptional case and thus awarding attorneys' fees to Stryker, and imposing a permanent injunction. The district court subsequently entered final judgment pursuant to its order.

Zimmer appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II

We turn first to Zimmer's appeal on the issues of claim construction, infringement, and validity.

Claim construction is an issue of law that we review de novo. *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272, 1276-77 (Fed. Cir. 2014) (en banc). In construing a claim term, we look at the term's plain and ordinary meaning as understood by a person of ordinary skill in the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). There is an exception to this general rule when a patentee sets out a definition and acts as her own lexicographer. *Thorner v.*

Sony Computer Entm't Am., LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Infringement is a question of fact. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1309 (Fed. Cir. 2009). Invalidity by reason of anticipation under 35 U.S.C. § 102 is a question of fact. *Atlas Powder Co. v. Ireco, Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999). Invalidity by reason of obviousness under 35 U.S.C. § 103 is a legal conclusion based on underlying facts. *Allergan, Inc. v. Sandoz Inc.*, 726 F.3d 1286, 1290 (Fed. Cir. 2013). Zimmer has the burden to prove invalidity by clear and convincing evidence. *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 736 (Fed. Cir. 2013).

On the issues of infringement and validity that the jury decided, Zimmer appeals the district court's denials of its motion for JMOL. Generally, a district court grants JMOL and sets aside the jury's verdict if it "finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50(a). We apply the law of the regional circuit to our review of the district court's grant or denial of a motion for JMOL. *ClearValue, Inc. v. Pearl River Polymers, Inc.*, 668 F.3d 1340, 1343 (Fed. Cir. 2012). The Sixth Circuit reviews the district court's decision on a motion for JMOL de novo. *Barnes v. City of Cincinnati*, 401 F.3d 729, 736 (6th Cir. 2005). "Judgment as a matter of law may only be granted if, when viewing the evidence in a light most favorable to the non-moving party, giving that party the benefit of all reasonable inferences, there is no genuine issue of material fact for the jury, and reasonable minds could come to but one conclusion in favor of the moving party." *Id.*

Appendix C

For the reasons stated below, we affirm the district court's judgment on the various defenses of non-infringement and invalidity that Zimmer raises across the three asserted patents. However, we also find that each of these defenses was not unreasonable.

The '329 Patent

The only asserted claim of the '329 patent, claim 2, describes features of a "pulsed irrigation surgical handpiece." According to this claim, the handpiece comprises a "hollow housing," which includes a "handle," and, in relevant part in this case, "an electric motor spaced between the top and bottom of said *handle* and located *in said handle*" adjacent to an irrigation tube within the housing. '329 patent col. 22 ll. 5-7 (emphases added). Zimmer contends that this limitation is critical for the purposes of infringement because, as indicated by the arrows below, the motor in its accused Pulsavac Plus device is not located in the handle—rather, it is located in the "nub" of the handpiece, the protrusion behind the barrel.

Appellees' Br. 11 (red arrows added).

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During claim construction, Zimmer took the position that no construction was necessary and that the claim term "handle" could be understood as having its plain and ordinary meaning to a person of ordinary skill in the art. *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2012 U.S. Dist. LEXIS 12329, *12 (W.D. Mich. Feb. 1, 2012), ECF No. 106 ("*Claim Construction Order*"). Stryker proposed to construe the term "handle" as "a portion of a device designed to be held by a hand or hands." *Id.* The district court adopted Stryker's proposed construction.

Stryker argued that nothing in the patent's specification otherwise limited the meaning of "handle," and that its definition for "handle" was consistent with general dictionaries. Zimmer argued that Stryker's express construction of the term, however, was too broad and read out the specification's consistent distinction between the "handle" and "barrel" portions of the claimed device.

The '329 patent generally describes various embodiments, all of which comprise a "hand-held housing having a handle and a barrel which extends from the upper end of the handle." '329 patent col. 3 ll. 28-31. Zimmer further supported its position with the language of claim 4, which depends on claim 2. Claim 4 separately describes both a "handle" and a "barrel," which Zimmer argued meant that the patentee maintained the distinction between the two parts of the handpiece.

However, the district court ultimately agreed with the Stryker that a device that met claim 2 did not need to have a discrete barrel joined to the handle, since this

claim could cover wand-shaped devices that existed in the prior art in which the entire handpiece functioned like a handle and no separate barrel was joined at an angle. The district court reasoned that since claim 4 is a dependent claim, it could cover the pistol-shaped design described in the specification, while claim 2 would more broadly cover wand-shaped devices as well.

On appeal, Zimmer also raises the prosecution history of U.S. Patent Application No. 08/559,133 ("'133 application"), the parent of the application that issued as the '329 patent. During the '133 application's prosecution, Stryker sought to overcome a rejection of claim 39 based on a prior art reference which described a pistol-shaped device with a barrel and a handle. Stryker traversed the rejection by arguing that the motor of the prior art handpiece was "not in the handle or at an angle to the barrel." Zimmer contends that claim 39 included the limitation "locating said motor in said handle," which is the same as the one at issue in the construction of "handle" in claim 2 of the '329 patent. Therefore, Zimmer argues, Stryker's statement disclaimed designs in which the motor is located in the barrel or nub of a pistol-shaped handpiece. *See Gemalto S.A. v. HTC Corp.*, 754 F.3d 1364, 1371 (Fed. Cir. 2014) ("[W]hen multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation."); *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1349 (Fed. Cir. 2004); *Elkay Mfg. Co. v. EBCO Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999).

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Zimmer did not raise its prosecution history argument during its claim construction briefing and the *Markman* hearing before the district court. The district court indicated that it would not alter the claim construction but, nevertheless, determined that it would still consider this argument in deciding Zimmer's motion for summary judgment of non-infringement. *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2012 U.S. Dist. LEXIS 184385, *2 (W.D. Mich. Nov. 29, 2012), ECF No. 248 ("*Summary Judgment Order I*"). The district court nevertheless denied Zimmer's motion, finding that the prosecution disclaimer was insufficiently "clear and unmistakable" because claim 39 of the '133 application had additional limitations that were absent in claim 2 of the '329 patent. *Id.* at 4-5.

The district court's analysis was flawed, however, because this was not a case in which the "purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself)." *Saunders Grp., Inc. v. Comfortrac, Inc.*, 492 F.3d 1326, 1333 (Fed. Cir. 2007).[1] There was no difference in the language

1. The limitation at issue in the original claim 39 of the '133 application was, in full: "a handpiece housing containing said pump and shell, said handpiece housing being elongate [sic] and bent and comprising a handle and a barrel, said barrel being open to and extending forward from an intersection with the top of the handle at an angle thereto, said hollow shell extending lengthwise along and within said handle into said angled intersection of said handle and barrel and *locating said motor in said handle remote from said angled intersection*, said link extending at said angle

describing the limitations as between the two claims at issue, rather, the limitation of claim 2 was included within claim 39. There is no reason why a disclaimer on a limitation within a narrower claim would not apply to the identical limitation within the broader claim, as the same concerns about the prior art would relate to both. *See, e.g.*, *Gemalto*, 754 F.3d at 1371 (applying a common disclaimer to both an independent and narrower dependent claim containing the same term).[2] That said, the district court did not err in rejecting Zimmer's argument as it related to claim construction, while still entertaining it in the context of infringement. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 889-90 (Fed. Cir. 2004) (affirming the district court's construction on the grounds that a proffered alternative construction was untimely raised). Therefore, we review Zimmer's argument only as it relates to infringement.

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from said shell and handle forwardly into and along the length direction of said barrel, said pump movable member extending along the length direction of said barrel and being reciprocatingly driven by said link in said length direction of said barrel." J.A. 16672 (emphasis added).

2. This is unlike the case cited by Stryker and the district court for the contrary proposition, *Middleton, Inc. v. Minnesota Mining and Manufacturing Co.*, 311 F.3d 1384, 1388-89 (Fed. Cir. 2002), in which the term at issue, "uniform" in the context of floor coverings, would potentially have a different meaning if it applied to the narrower claim—limited to smooth sporting surfaces—and a subsequent, broader claim that contemplated other kinds of surfaces. Here, a limitation on the location of the motor within the handpiece would mean the same thing in the context of either claim.

Appendix C

Infringement is a question of fact, and we must give a substantial degree of deference to the jury's verdict. At trial, Stryker presented evidence indicating that a medical professional could hold Zimmer's Pulsavac Plus by the nub behind the barrel, where the motor was located. In addition, Stryker presented evidence that the barrel of the Pulsavac Plus was called a "barrel grip" in an associated patent application, and the barrel included indentations that would allow the device to be used while held by the barrel. Stryker also persuaded the jury that it was reasonable to infer that if the nub behind the barrel was also shaped such that it was at least *capable* of being held, then it would be "a portion of the device designed to be held by hand," in accordance with the district court's construction of "handle" in the claim at issue. In light of the evidence presented at trial as a whole, along with the prosecution history, we do not find that "reasonable minds could come to but one conclusion" that Zimmer did not infringe claim 2 of the '329 patent. *Barnes*, 401 F.3d at 736. Accordingly, we affirm, though Zimmer's claim construction and non-infringement positions were not unreasonable.

The '807 Patent

Infringement

Zimmer argues that the district court erred in granting summary judgment of infringement of the '807 patent's asserted claims. We review the district court's grant of summary judgment de novo. *Dixon v. Univ. of Toledo*, 702 F.3d 269, 273 (6th Cir. 2012). "Summary

judgment is proper where there exists no issue of material fact and the moving party is entitled to judgment as a matter of law." *ETW Corp. v. Jireh Publ'g, Inc.*, 332 F.3d 915, 920 (6th Cir. 2003) (citing Fed. R. Civ. P. 56(c)). All reasonable factual inferences are drawn in favor of the nonmoving party. *Id.*

Zimmer's argument on appeal centers on whether its products include, as required for all the asserted claims, "a front end for *receiving* the discharge tube and the suction tube." '807 patent col. 27 ll. 35-37 (emphasis added).[3] This limitation describes the interface between the nozzles at the front end of the handpiece and the nozzles of a removable tip that includes discharge and suction tubes. Zimmer argues that the claim language requires that there be male openings on the tip that fit into the female nozzles on the handpiece. Therefore, Zimmer contends that the accused devices do not infringe because they are designed with female openings on the tip that fit into tapered male nozzles on the handpiece. To support its position, Zimmer relies on various dictionary definitions of "receive," which it argues all have some variant of the verbs "to contain" or "to hold." *See* Appellants' Br. 57. Zimmer argues that this meaning is consistent with the specification, which discloses a single embodiment in which the neck of the suction tube "seats in" the drain tube—and, specifically, that this configuration is designed to avoid "leakage of the fluid and material as it flows in the drain tube." '807 patent col. 11 ll. 29-34; *see also* Figure 8.

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3. Stryker asserted claim 45 and certain of its dependent claims.

As an initial matter, Stryker's argument that Zimmer waived a narrower construction of the term "receive" is unavailing. The parties and the district court directly addressed this issue during the summary judgment proceedings. Moreover, unlike the dispute concerning the meaning of "handle" in the '329 patent, the district court did not note any waiver and expressly considered the scope of "receive" in evaluating whether Zimmer's design infringed. *See Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005) (contemplating "rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves").

Stryker further argues that the specification provides a broader disclosure of "an irrigation handpiece to which complementary tips can be readily *coupled*." '807 patent col. 1 ll. 10-12 (emphasis added); *see also* col. 2 ll. 45-47 (disclosing "a tip assembly [that] readily *seals* to a complementary handpiece") (emphasis added). Stryker also points to Zimmer's own lay witnesses, who admitted that its Pulsavac Plus handpiece "receives" the tips.[4]

4. Stryker also argues that Zimmer's invalidity argument relies on the prior art Var-A-Pulse device including the "receive" limitation—even though it has the same kind of tip assembly as the Pulsavac Plus. We note, however, that nothing precludes Zimmer from arguing for a narrower application of the limitation on the infringement context, while also arguing, in the alternative, that—if the district court were to disagree—the patent claim would be so broad as to be invalid.

The district court noted that, in its view, "Zimmer's reading of 'receive' is artificially narrow." *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2012 U.S. Dist. LEXIS 184383, *15 (W.D. Mich. Nov. 29, 2012), ECF No. 247 ("*Summary Judgment Order II*"). Instead, the district court reasoned that "[t]he word "receives" in this context can only mean that one part of the device connects directly with another part of the device." *Id.* Thus, the district court found that Zimmer infringed. While it is a close case, we do not find that the district court erred in granting summary judgment of infringement based on the record before it.

Invalidity

Zimmer also appeals the district court's holding that the asserted claims of the '807 patent were anticipated by its prior art Var-A-Pulse device, the predecessor of the Pulsavac Plus. Stryker argues that the Var-A-Pulse device does not anticipate because it is missing the "lock assembly" limitation of the asserted claims, which require that there be "a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube to said body." '807 patent col. 27 ll. 35-37. The district court adopted Stryker's proposed construction of the term "lock assembly" as "components that work together to secure or fasten the tip to the hand-piece." *Claim Construction Order* at 16. In the Var-A-Pulse device, the tip was attached to the handpiece in such a way that the tip nozzles fit into interior housing grooves at the front of the handpiece, which were then held together by friction. Zimmer argues that under the district court's construction, the limitation was present in the prior art

because the nozzles were "secured or fastened" when they were fit in the interior housing groove.

At trial, Zimmer presented evidence that included the Var-A-Pulse's technical documentation, which indicated that the tip should be "secured" to the handpiece, as well as testimony from various Stryker witnesses admitting that the tip nozzles were fastened to the handpiece when they were inserted. Stryker argued that, unlike the accused Pulsavac Plus devices, which include a locking ring to secure the tip, there is no separate part or assembly in the Var-A-Pulse. Stryker also contended the prior art device did not include the full claim limitation, which requires that the lock assembly be "mounted" to the front end of handpiece. Stryker argued that because Zimmer identified a "lock assembly" that itself included the housing groove that is part of the front end, Zimmer was essentially arguing that the lock assembly was mounted to itself, thus nullifying the limitation. Stryker also presented evidence to the jury showing that the Var-A-Pulse tips readily fell off the front end of the handpiece, and that this led the development of the locking ring in the Pulsavac Pulse.

The jury ultimately found that there was no clear and convincing evidence that the Var-A-Pulse device anticipated the '807 patent's asserted claims. In light of the evidence that was presented, we find that a reasonable jury could have reached this verdict. Accordingly, we affirm.

Appendix C

The '383 Patent

At trial, Zimmer argued that the asserted claims of the '383 patent were obvious at the time of the invention in light of U.S. Patent No. 5,046,486 ("Grulke"), U.S. Patent No. 4,817,599 ("Drews II"), and U.S. Patent No. 5,350,356 ("Bales"). Zimmer contends that all of the limitations of the '383 patent's asserted claims were collectively present in the prior art references. Stryker does not directly dispute this point. Instead, it principally argues that because the designs claimed by Grulke and Drews II each exclude certain components described in the claims, one of ordinary skill in the art would not have been motivated to combine these references. In brief, Grulke disclosed a pulsed lavage system that uses a pneumatic, rather than an electric, motor. Drews II disclosed a pulsed irrigation system, powered by an electric motor, that is used as an eye wash.

At trial, Zimmer argued that it would have been obvious to one of ordinary skill to try to replace the pneumatic motor of Grulke with the electric motor in Drews II. Zimmer further argued that any reconfiguration of Grulke to accommodate an electric motor could be done by one of ordinary skill. *See In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1382 (Fed. Cir. 2007) ("[W]e do not ignore the modifications that one skilled in the art would make to a device borrowed from the prior art."). Zimmer also argued that even though the Grulke reference was directed to orthopedic pulsed lavage systems, and the Drews II reference was directed to eyewash systems, they both described pressured water irrigation in hospitals and

clinics. Zimmer contended that that a person of ordinary skill in the art of pulsed lavage devices would thus be aware of the art in both fields and would be motivated to combine features from each of them. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007) ("Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.").

Zimmer also presented evidence of the examiner's rejection of certain claims in Stryker's prosecution of U.S. Patent Application No. 11/563,504 ("'504 application"), a continuation of the '383 patent, which occurred during the discovery phase of this case. During that patent application's prosecution, the examiner issued a non-final office action, rejecting certain claims of the '504 application as obvious over Grulke "and further in view of Drews II." J.A. 17226. Stryker did not attempt to traverse the rejection and instead ultimately abandoned the application. Stryker principally argued that because the claim at issue in the '504 application included certain different limitations, the examiner's rejection did not have any relevance to the '383 patent's claims. We note, however, that the difference in the detail of the claims is immaterial as to whether it would have been obvious to combine Grulke and Drews II. While persuasive, the examiner's proffered rejection is not on its own dispositive, in large part because the U.S. Patent and Trademark Office ("PTO") and district courts "take different approaches in determining invalidity and on the same evidence could

quite correctly come to different conclusions." *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1428 (Fed. Cir. 1988).

Stryker also argued that the Grulke device differed substantially from the Drews II device. For example, it was designed for surgery rather than eyewashing. Grulke also disclosed a large device that was wheeled into an operating room that had many components that differed from those in the portable device disclosed Drews II. Stryker presented expert testimony rebutting Zimmer's evidence that it would have been obvious to combine these references.

On the basis of the record presented at trial, we agree with the district court that a reasonable jury could conclude that one of ordinary skill in the art would not have been motivated to combine the Grulke and Drews II references, even in light of the examiner's rejection of related claims on the basis of this combination. This is sufficient to affirm the district court's determination that Zimmer did not show, by clear and convincing evidence, that the '383 patent's claims were obvious.

For this reason, we need not reach other issues, including the evidence of secondary considerations of non-obviousness. Therefore, we affirm the district court's determination that the '383 patent's asserted claims were not obvious over the combination of Grulke, Drews II, and Bales.[5]

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5. Zimmer also appeals the jury's finding that Stryker's products were sufficiently marked by the '383 patent during part

Appendix C

III

Willful Infringement

To establish willful infringement, the patentee has the burden of showing "by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent." *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc). "The state of mind of the accused infringer is not relevant to this objective inquiry." *Id.* Only if the patentee establishes this "threshold objective standard" does the inquiry then move on to whether "this objectively-

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of the period for which it sought damages. We need not reach this issue, because we affirm the finding that Zimmer infringed the '807 and '329 patents, which is sufficient to support all of Stryker's award of damages for lost profit. However, we note that the jury was indeed incorrectly instructed that it should consider "whether some portion of the Stryker products not marked with a particular patent number were marked with other *related patent* notices." *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, 2013 U.S. Dist. LEXIS 171817, *32 (W.D. Mich. Aug. 7, 2013), ECF No. 537 ("*Post-Verdict Order*") (emphasis added). Because of this instruction, the jury could have been misled to consider a product marked with the number of a patent related to the '383 patent—but not with the '383 patent number itself—as being sufficiently marked. While the district court appears to have relied on cases that suggest that there is some flexibility in what constitutes sufficient marking, the statute is not so broad as to allow marking with a different patent—with different claims—to provide sufficient notice to the public. Rather, the plain language of the marking statute provides that the patented article be marked with the "number of *the* patent." 35 U.S.C § 287(a) (emphasis added).

defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer." *Id.* We have held that objective recklessness, even though "predicated on underlying mixed questions of law and fact, is best decided by the judge as a question of law subject to *de novo* review."[6] *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1007 (Fed. Cir. 2012). Objective recklessness will not be found where the accused infringer's "position is susceptible to a reasonable conclusion of no infringement." *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1310 (Fed. Cir. 2011).

The district court failed to undertake an objective assessment of Zimmer's specific defenses to Stryker's claims. Instead, the district court's analysis of objective reasonableness summarily asserted that the "jury heard testimony" that Zimmer "all but instructed its design team to copy Stryker's products." *Post-Verdict Order*, 2013 U.S. Dist. LEXIS 171817 at *40. The district court further concluded that the "pioneering" nature of Stryker's inventions and the secondary considerations of

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6. This court has not yet addressed whether *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 188 L. Ed. 2d 816 (2014), or *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1746, 188 L. Ed. 2d 829 (2014), altered the standard of review under which this court analyzes the objective prong of willfulness. However, as the district court failed to undertake any objective assessment of Zimmer's specific defenses, the district court erred under any standard of review and thus this court need not now address what standard of review is proper regarding the objective prong of willfulness.

non-obviousness "made it dramatically less likely that Zimmer's invalidity arguments were reasonable." *Id.*

An objective assessment of the case shows that Zimmer presented reasonable defenses to all of the asserted claims of Stryker's patents.

First, with respect to the '329 patent, the motor in the Zimmer's Pulsavac Plus is located in the nub at the rear of the barrel of its pistol-shaped device. Stryker's infringement case relied on first persuading the district court to broadly construe the claim term "handle" to include the barrel of a pistol-shaped device—even though the patent specification only describes the handle and barrel separately. Then, Stryker had to persuade the jury that the barrel nub was a part of the device "designed to be held by hand," even in light of prosecution history in which Stryker distinguished between the location of the motor in the handle as opposed to the barrel. Though Stryker ultimately prevailed, Zimmer's arguments were not unreasonably founded on the plain meaning of "handle" in the context of a pistol-shaped device, the specification's exclusive disclosure of pistol-shaped devices, and the prosecution history—all on which it could have relied to provide notice of what the patent claims covered.

Second, with respect to the '807 patent, the specification only disclosed female nozzles on the front end of the device and male nozzles on the removable tip, which would be consistent with the claim requiring that the front end "receive" the tip. Zimmer's devices had the exact opposite configuration: tapered male nozzles on the

front end and female nozzles on the tip. Furthermore, the prior art Var-A-Pulse devices included all of the asserted claims' limitations except one. In light of the district court's claim construction, Stryker's defense to Zimmer's argument relied on persuading the jury that even though the tip's nozzles could fit into the handpiece and be held in place through friction with internal housing grooves, that did not mean they were "secured or fastened." Again, though Stryker prevailed, Zimmer's defenses were not unreasonable.

Third, with respect to the '383 patent, Zimmer's obviousness argument relied on a combination of references that was also raised by a PTO examiner during Stryker's prosecution of a related patent application—in an office action that occurred during discovery in this litigation. Zimmer's reliance on this combination was not without reason, in particular since the references related to pressured water irrigation systems used in hospitals and clinics. Therefore, even if Zimmer's defenses failed at trial, it still made a reasonable case that the '383 patent's asserted claims were obvious and thus invalid.

In sum, we find that Zimmer's defenses to the infringement of each patent claim that Stryker asserted were not objectively unreasonable, and, therefore, it did not act recklessly.

Attorneys' Fees

As the court reversed the district court's determination of willful infringement, and the district court's award of

attorneys' fees was based on that determination, we vacate the district court's grant of attorneys' fees. However, because there exist further allegations of litigation misconduct in this case and because the standard for finding an exceptional case has changed since the district court issued its finding regarding attorneys' fees, we remand this issue for further consideration by the district court.

IV

For the aforementioned reasons, we affirm the jury's verdict of infringement and validity of all three patents at issue, as well as its award of lost profits. However, we reverse the district court's determination of willful infringement and thus vacate its award of trebled damages. We also vacate and remand the district court's finding of an exceptional case and its award of attorneys' fees. The case is remanded for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, REVERSED-IN-PART, VACATED-IN-PART, AND REMANDED

APPENDIX D — ORDER OF THE UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION, FILED AUGUST 7, 2013

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., AND STRYKER SALES CORPORATION,

Plaintiffs and Counter-Defendants,

v.

ZIMMER INC., AND ZIMMER SURGICAL, INC.,

Defendants and Counter-Plaintiffs.

CASE NO. 1:10-CV-1223

ORDER REGARDING PARTIES' POST-VERDICT MOTIONS

I. BACKGROUND

Stryker and Zimmer are the two principal participants in the market for orthopedic pulsed lavage devices. A modern, orthopedic pulsed lavage device is a combination spray-gun and suction-tube, used by medical professionals to clean wounds and tissue during surgery. In 2010, Stryker sued Zimmer, alleging that Zimmer's line of

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Pulsavac Plus pulsed lavage devices infringed three of Stryker's patents—U.S. Patent No. 6,022,329 ("the 329 patent"), U.S. Patent No. 7,144,383 ("the 383 patent"), and U.S. Patent No. 6,179,807 ("the 807 patent"). After claims construction and a round of summary judgment, one infringement claim and 22 invalidity defenses remained for trial. So did a series of remedial issues. (See Order Regarding Stryker's Motion for Partial Summary Judgment of Infringement, doc. # 247).

After two weeks of trial—featuring hundreds of exhibits and more than a dozen witnesses—and multiple days of deliberation, the jury returned a verdict unequivocally in Stryker's favor. In particular, the jury found: (1) that the Pulsavac Plus products infringed claim 2 of the 329 patent; (2) that Zimmer failed to establish any of its 22 invalidity contentions; and (3) that Stryker was entitled to $70 million in lost profits. (Verdict, doc. # 381.) The jury also found that Zimmer willfully infringed the valid claims under the patents in suit. (*Id.*)

The jury's verdict for Stryker means that the post-verdict motions must be evaluated against the prevailing narrative at trial. Here is a summary of that narrative. Through the proceedings, the jury learned that pulsed lavage devices had, for years, served an important function in surgical procedures—cleaning out wounds and removing necrotic tissue from wound sites. Early-model pulsed lavage devices were bulky and required a centralized power source. They had to be wheeled around a hospital, from one room to another. Stryker solved the problems associated with the size and power

needs of pulsed lavage devices by designing a portable, disposable, battery-powered, hand-held pulsed lavage device. Zimmer's Manufacturing Manager and Rule 30(b)(6) witness agreed that the Stryker products were "pioneering."

Zimmer had no answer for Stryker's new technology and saw its market share fall precipitously, to the point where Zimmer's presence in the pulsed lavage marketplace was at risk. Rather than relying on their own engineers to develop an alternative, Zimmer hired an independent contractor with no experience in pulsed lavage devices. In essence, Zimmer handed the independent contractor a copy of Stryker's product and said, "Make one for us." Under those conditions, it is not surprising that the finished Zimmer product turned out to look and function like Stryker's product. Nevertheless, Zimmer got its product to market quickly and in direct competition with Stryker. In doing so, it did not seek advice of outside patent counsel to assess the potential for infringement of Stryker's patents, or to opine on the validity of Stryker's patents.

Once Zimmer introduced its competing product, there was fierce, direct market competition between Stryker and Zimmer. Zimmer constantly sought to lure customers away from Stryker and had a fair amount of success in doing so with its new product. Then, in 2007, Zimmer was forced to pull its product from the market due to technical problems. Zimmer had received so many complaints about its product that it decided to cease production entirely and not re-start production until December 2008, when

it reentered the market. Upon reentering the market, Zimmer recaptured most of the market share it had forfeited by its year-plus absence.

Stryker filed this suit against Zimmer in 2010, alleging infringement of the 329, 807, and 383 patents. Zimmer lost every argument it advanced at claim construction, then lost most of the disputed claims on summary judgment. It lost all of its remaining claims at trial. At the time the jury announced its verdict, Zimmer had not changed its product design.[1] This is consistent with both the market and litigation strategy that Zimmer has followed for years. Zimmer chose a high-risk/high-reward strategy of competing immediately and aggressively in the pulsed lavage market and opted to worry about the potential legal consequences later. When Stryker sued, Zimmer's able counsel offered the most plausible defenses that

1. On May 21, 2013, almost four months after the close of trial and weeks after the parties completed their third and final round of briefing on their post-verdict motions, Zimmer unilaterally filed a brief attempting to move to introduce new evidence of a recently-completed redesign of the Pulsavac Plus (doc. # 531). Stryker promptly moved to strike (docket # 534). The Zimmer redesign referenced in the unilateral filing (docket # 531) was not available to the jury at trial. Nor was the redesign raised in the course of the parties' extensive post-verdict briefing. Moreover, Stryker has not had an opportunity to conduct discovery of Zimmer's redesign or the individuals responsible for it. In light of those factors, the Court grants Stryker's motion to strike (docket # 534). In addressing the parties' post-verdict motions, the Court will not consider the information Zimmer unilaterally submitted after the jury returned its verdict, and after the parties completed post-verdict briefing.

were available to them given Zimmer's pre-litigation market conduct. Ultimately, however, the trial proofs demonstrated that this was not a close case. The relative quality of the expert testimony on liability was notably favorable to Stryker. On damages, the quality of the expert testimony was closer, but still favored Stryker. Zimmer ultimately stuck with an "all or nothing" damages defense—rather than trying to chip away at Stryker's proposed lost profit number or its alternative theory—and lost, as the jury's verdict demonstrates.

Both sides have brought a number of post-verdict motions. Zimmer has brought ten post-verdict motions for judgment as a matter of law ("JMOL") or for a new trial. Specifically, Zimmer has moved: (1) for JMOL to preclude Stryker from recovering lost profits damages from before November 5, 2010 (doc. # 369); (2) for JMOL as to the invalidity of claim 2 of the 329 patent, or, in the alternative, for a new trial on the validity of claim 2 (doc. # 401); (3) for JMOL barring Stryker from recovering pre-suit damages under the doctrine of laches (doc. # 418); (4) for JMOL of non-infringement of claim 2 of the 329 patent, or, in the alternative, for a new trial on the issue of non-infringement of claim 2 (doc. # 425); (5) for JMOL limiting Stryker's damages because Stryker failed to mark its pulsed lavage devices in accordance with 35 U.S.C. § 287(a) and for a new trial on the issue of marking (doc. # 430); (6) for a new trial (doc. # 435); (7) for JMOL that Stryker's asserted claims under the 383 patent are invalid, or, in the alternative, for a new trial on the validity of those claims (doc. # 438); (8) for JMOL that claims 45, 50, 51, and 52 of the 807 patent are invalid,

or, in the alternative, for a new trial on the validity of those claims (doc. # 442); (9) for JMOL that Zimmer did not wilfully infringe Stryker's patents (doc. # 447); and (10) for JMOL to preclude Stryker from receiving lost profits damages and limiting Stryker's reasonable royalty recovery, or, in the alternative, for a new trial on damages (doc. # 453). Stryker has brought five post-verdict motions, seeking (1) a permanent injunction against Zimmer or, in the alternative, an ongoing royalty (doc. # 396); (2) supplemental damages (doc. # 414); (3) a finding of an "exceptional case" and an award of attorney's fees (doc. # 410); (4) an award of prejudgment interest (doc. # 399); and (5) enhanced damages for willful infringement (doc. # 405).

Both parties' post-verdict motions are addressed in this Order. The Court does not believe oral argument is necessary to illuminate the issues exhaustively briefed by the parties. For the reasons set out below, each of Zimmer's motions is **DENIED** and each of Stryker's motions is **GRANTED**.

II. ZIMMER'S POST-VERDICT MOTIONS

Zimmer is not entitled to prevail on any of its post-verdict motions.

A. Motion for JMOL to Preclude Stryker from Recovering Lost Profits Damages from Before November 5, 2010 (doc. # 369)

Zimmer's first motion is for judgment as a matter

of law ("JMOL") to preclude the Stryker plaintiffs from recovering lost profits damages from before November 5, 2010, on the ground that Stryker Sales Corporation lacks constitutional standing to sue for lost profits from before that date. A party is entitled to lost profits damages from an infringer if, during the period of infringement, the party had the right to exclude others from making, using, selling, or offering to sell inventions practicing the patents-in-suit. See *WiAV Solutions LLC v. Motorola, Inc.*, 631 F.3d 1257, 1264 (Fed. Cir. 2010) (citing 35 U.S.C. § 271(a) and *Warth v. Seldin*, 422 U.S. 490, 500, 95 S. Ct. 2197, 45 L. Ed. 2d 343 (1975)). The question raised by Zimmer's motion is whether Stryker Sales Corporation had that right before November 5, 2010. See *id.* (citing *Morrow v. Microsoft Corp.*, 499 F.3d 1332, 1340 (Fed. Cir. 2007)).

At the outset, the parties dispute whether Stryker's motion is properly characterized as asserting a lack of standing or merely as arguing against a particular damages theory. The distinction is an important one. Constitutional standing is a component of federal subject matter jurisdiction, meaning a party's lack of standing may be raised at any time in the litigation. See *Zurich Ins. Co. v. Logitrans, Inc.*, 297 F.3d 528, 531 (6th Cir. 2002) ("Article III standing is a jurisdictional requirement that cannot be waived, and such may be brought up at any time in the proceeding."); see also FED. R. CIV. P. 12(h)(3) (issues concerning a court's subject matter jurisdiction may be raised at any time). A motion to limit damages, on the other hand, goes to the merits of a party's claim and, therefore, may be waived if not included in the final

pre-trial order. See *Rockwell Int'l Co. v. United States*, 549 U.S. 457, 474, 127 S. Ct. 1397, 167 L. Ed. 2d 190 (2007) ("[C]laims, issues, defenses or theories of damages not included in the pretrial order are waived."); *Ghandi v. Detroit Police Dep't*, 823 F.2d 959, 962-63 (6th Cir. 1987) ("[A]n attempt to pursue any issue not listed in the [final pre-trial] order may be rejected by the Court."). The issue was not preserved in the final pre-trial order in this case. (See Order Accepting Parties' Pretrial Order, doc. # 345; Proposed Final Pretrial Order, doc. # 338.)

Zimmer casts its motion as asserting that Stryker lacks standing to pursue lost profits damages from before November 5, 2010. But Zimmer does not contest that Stryker Sales Corporation has standing to pursue lost profits damages after that date. Zimmer acknowledges, then, that Stryker Sales Corporation has standing to pursue *some* lost profits damages; it simply believes that Stryker is not entitled to *all* the lost profits damages it seeks. The dispute underlying Zimmer's motion, in other words, is not whether Stryker has claimed an injury that might entitle it to lost profits damages; it is the extent of that injury. That is the essence of the difference between a motion to limit damages and a motion challenging standing. Cf. *Davis v. FEC*, 554 U.S. 724, 734, 128 S. Ct. 2759, 171 L. Ed. 2d 737 (2008) (to survive a standing challenge, a plaintiff need only demonstrate that it has "standing for each claim [it] seeks to press and for each form of relief that is sought") (internal quotations omitted). Because Zimmer's motion is one to limit lost profits damages, rather than a motion challenging Stryker's standing to pursue lost profit damages altogether, it is waived unless

Zimmer raised it in the pre-trial order. A review of the Court's pre-trial order reveals that Zimmer did not raise the issue there, meaning it waived the argument going forward. (See Proposed Pre-Trial Order, doc. # 338; Order Accepting Pre-Trial Order Subject to Limitations, doc. # 345.) Consequently, Zimmer's motion must be denied as untimely.

Even on the merits, Zimmer is not entitled to prevail. Stryker Sales Corporation or other Stryker affiliates had full control over the patents-in-suit from 2002, when the earliest one issued. Stryker never shared with anyone outside the Stryker family more than a non-exclusive license to practice certain aspects of one of the patents. A series of *nunc pro tunc* agreements executed among the Stryker plaintiffs on November 5, 2010 formalized the rights among the Stryker parties. (See, *Nunc Pro Tunc* Amendment, Pls.' Trial Ex. 124-27.) By their terms, the agreements were retroactive, so that, under the agreements, Stryker Sales Corporation's exclusive license stretches back to January 1, 2002. (*Id.*) No one other than a Stryker party has ever had power to exclude others from practicing the patents-in-suit.

Zimmer complains, first, that Stryker had only a bare license, not an exclusive license. An exclusive license is one that gives the licensee the right to exclude others from making, using, selling, or offering to sell inventions practicing particular patents. See *WiAV Solutions LLC v. Motorola, Inc.*, 631 F.3d 1257, 1264 (Fed. Cir. 2010). A bare license, by contrast, is simply a covenant by the licensor not to sue the licensee for using the licensor's property in

a specified manner. See *Ortho Pharm. Corp. v. Genetics Inst., Inc.*, 52 F.3d 1026, 1032 (Fed. Cir. 1995). Only an "exclusive licensee"—that is, the holder of an exclusive license—may sue for lost profits damages. *Id.* Because Stryker independently gave Davol a limited license to practice the patents-in-suit for pulsed lavage devices with batteries in the handpiece, Zimmer contends that Stryker Sales Corporation is precluded from seeking lost profits.

The Court disagrees and concludes that Stryker had the right to seek lost profits as an exclusive licensee. By its terms, Stryker Sales Corporation's license empowered it to exclude others from selling or offering to sell pulsed lavage devices practicing the patents-in-suit with batteries outside the handpieces. (See *Nunc Pro Tunc* Amendment, Pls.' Trial Ex. 126, ¶ 7 (granting Stryker Sales Corporation "Exclusive Sub-Licens[e] and Exclusive Distributor[ship] with Respect to Pulsed Lavage Products"); see also Distribution Agreement, Pls.' Trial Ex. 120, ¶ 2.01 (giving Stryker Sales Corporation rights as "exclusive distributor").) That made the license an exclusive one. The license was exclusive, not because Stryker Sales Corporation was the one and only party practicing the patents-in-suit in certain categories of pulsed lavage devices, but because it gave Stryker Sales Corporation the power to choose who else could practice the patents-in-suit for those categories of pulsed lavage devices (*i.e.*, the power to exclude others from practicing the patents-in-suit). *Morrow v. Microsoft Corp.*, 499 F.3d 1332, 1340 (Fed. Cir. 2007) ("Parties that hold the exclusionary rights [under a patent] are often identified as exclusive licensees, because the grant of an exclusive license to

make, use, or sell the patented invention carries with it the right to prevent others from practicing the invention."); *Intellectual Prop. Dev., Inc. v. TCI Cablevision of Cal.*, 248 F.3d 1333, 1346 (Fed. Cir. 2001) ("A party . . . that has the right to exclude others from making, using, and selling an invention described in the claims of a patent is . . . injured by another entity that makes, uses, or sells the invention."). Stryker Sales Corporation did not lose the power to exclude when it allowed Davol to practice the patents-in-suit, any more than a landowner loses the power to exclude the whole public from his property when he chooses to admit a guest. In particular, Stryker Sales Corporation retained the right to keep Zimmer from practicing the patents-in-suit in pulsed lavage devices with batteries outside the handpiece. Thus, Davol's limited license to practice the patents-in-suit did not change the fact that Stryker Sales Corporation's license was exclusive for purposes of this suit.

Zimmer's broader challenge is to the retroactive application of the *nunc pro tunc* agreements. Zimmer contends that the agreements cannot give Stryker Sales Corporation the right to lost profits damages for a period when Stryker Sales Corporation was not actually an exclusive licensee of the patents-in-suit. At bottom, that is just another way of saying that *nunc pro tunc* agreements should not be retroactively effective. As Stryker points out, crediting Zimmer's argument would eliminate the possibility of *nunc pro tunc* agreements, despite their well-established use in the law. Indeed, the Federal Circuit has, in the past, given retroactive effect to *nunc pro tunc* agreements like the ones here at issue.

See, e.g., *Mas-Hamilton Grp. v. LaGard, Inc.*, 156 F.3d 1206, 1210-11 (Fed. Cir. 1998). Of course, a party may not use *nunc pro tunc* agreements to manufacture standing where it would not otherwise exist. See, e.g., *Enzo APA & Son, Inc. v. Geapag A.G.*, 134 F.3d 1090, 1093 (Fed. Cir. 1998). That is not an issue here, though. As noted above, Stryker Sales Corporation unquestionably has standing to sue for lost profits damages in this case, regardless of whether the *nunc pro tunc* agreements are retroactively effective. Consequently, the agreements are enforceable as written, meaning Stryker Sales Corporation is entitled to lost profits damages for any infringement by Zimmer during the period at issue in this litigation. See *Mas-Hamilton Grp.*, 156 F.3d at 1211.

B. Motions for JMOL as to the Invalidity of Claim 2 of the 329 Patent and the Asserted Claims of the 383 and 807 Patents, or, in the Alternative, for a New Trial on the Validity of Those Claims (doc. ## 401, 438, and 442)

Zimmer next argues that the jury erred in rejecting Zimmer's invalidity defenses on several claims of the patents-in-suit, so that JMOL on invalidity is appropriate. Rule 50 of the Federal Rules of Civil Procedure permits a court to render JMOL only if a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue. FED. R. CIV. P. 50(a)(1). Phrased differently, the question is "whether a party has produced evidence 'legally sufficient' to warrant a jury determination in that party's favor." *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, n.5, 127 S. Ct. 2499, 168 L. Ed. 2d 179

(2007) (quoting Fed. R. Civ. P. 50(a)(1)). Rule 50's standard for JMOL mirrors Rule 56's standard for summary judgment so that, in ruling on a motion for JMOL, a court must consider the entire record and draw all reasonable inferences in favor of the nonmoving party. *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150-51, 120 S. Ct. 2097, 147 L. Ed. 2d 105 (2000).

The validity of the claims at issue in this case has been thoroughly explored—both before and during this litigation. In deciding to issue the patents-in-suit, the Patent Office conferred a presumption of validity on the claims. At summary judgment, the Court thoroughly considered the validity of several claims in the patents-in-suit. And, at trial, each side spent hours arguing the issue of validity to the jury. At every stage, the decision-maker rejected Zimmer's contention that claims within the patents-in-suit were invalid. Everything about the history of this case suggests that a reasonable jury could readily conclude that Zimmer failed to establish invalidity by the clear and convincing evidence required. See 35 U.S.C. § 282 ("A patent shall be presumed valid."); *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1370 (Fed. Cir. 2003) (emphasizing the same); Order Denying Zimmer's Mot. for Summ. J. of Invalidity, doc. # 249; *Radvansky v. City of Olmsted Falls*, 496 F.3d 609, 614 (6th Cir. 2007) (to prevail on motion for JMOL, movant "must overcome the substantial deference owed to a jury verdict"); *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 697 F.3d 387, 414 (6th Cir. 2012) (same). Zimmer's bare disagreement with the jury's conclusion on validity is not, by itself, a reason to second-guess all those earlier decisions.

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In each of its motions for JMOL on invalidity, Zimmer asserts that Stryker either read nonexistent limitations into the contested claims or misrepresented the law regarding anticipation and obviousness. For instance, with respect to the validity of claim 2 of the 329 patent, Zimmer says "Stryker argued [the] Ito [device] is not a pulsed irrigation handpiece because its water reservoir is too small for knee surgery . . . [notwithstanding that] claim does not require a certain sized water reservoir nor is its use limited to knee surgery." (Def.'s Br. in Supp. of Motion for JMOL, doc. # 402, at 5.) The purported "limitations" of which Zimmer complains, however, are really just distinctions between the prior art references and the claimed inventions. Far from rendering such distinctions impermissible, the law on obviousness expressly requires the jury to consider whether a prior art reference is "from the same field of endeavor [or] reasonably pertinent to the particular problem with which the inventor is involved." *In re Clay*, 966 F.2d 656, 658-59 (Fed. Cir. 1992). Evidence that a device from one field has no clear connection to a second field, or that it would be impractical to use the device in the second field, plainly makes it less likely that the device rendered obvious an invention in the second field. For that reason, Stryker's arguments distinguishing its inventions from Zimmer's prior art references furnish an adequate basis from which a reasonable jury could conclude that the claimed inventions were non-obvious.

More to the point, what Stryker argued at trial is not dispositive for purposes of reviewing a motion for JMOL. The question on JMOL is whether Zimmer can show, based on the record evidence, that the jury could

not reasonably have found for Stryker. FED. R. CIV. P. 50(a)(1). But a reasonable jury could very well have found in Stryker's favor on the validity issues, based on the record in this case. In the course of hours of testimony, first by the inventor of the patents-in-suit, and then by Stryker's technical expert, Stryker meticulously distinguished its inventions from Zimmer's prior art references—by pointing out why the prior art references did not constitute "prior art" under 35 U.S.C. § 103, by emphasizing why the patents-in-suit were not rendered obvious by the prior art references, and by illustrating why the prior art references did not disclose a particular element from a given claim. (See, e.g., Trial. Tr., doc. # 388, at 20 (testimony by Stryker's technical expert, Neil Sheehan, explaining why a person of ordinary skill in the art would not think the Ito device rendered the patents-in-suit obvious); *id.* at 22-23 (testimony by Sheehan explaining that the Ito device does not, in fact, disclose a yoke)). Zimmer, obviously, disagreed with those distinctions and its own technical expert spent several hours at trial explaining why he thought they were wrong. The jury, however, was entitled to credit Stryker's expert's opinions about whether the claims at issue were anticipated or whether they would have been obvious to one of ordinary skill in the art. It was certainly not unreasonable for doing so, any more than the patent office was unreasonable for granting the patents in the first place, or the Court was unreasonable for denying Zimmer's earlier motions for summary judgment on the basis of invalidity. Because the jury could reasonably have adopted Stryker's distinctions over Zimmer's arguments to the contrary, JMOL is simply not appropriate here.

For many of the same reasons, Zimmer's motions for a new trial on the validity of the contested claims are also denied. Under Rule 59, after a jury trial, "[a] court may, on motion, grant a new trial on all or some of the issues . . . for any of the reasons for which new trials have heretofore been granted in an action at law in federal court." FED. R. CIV. P. 59(a)(1)(A). "Generally, a court may grant a new trial under Rule 59 if the verdict is against the weight of the evidence, if the damages award is excessive, or if the trial was influenced by prejudice or bias, or otherwise unfair to the moving party." *Conte v. Gen. Housewares Corp.*, 215 F.3d 628, 637 (6th Cir. 2000); see also *Holmes v. City of Massillon*, 78 F.3d 1041, 1045-46 (6th Cir. 1996) (same point). A court reviewing a motion under Rule 59 "must compare and weigh the opposing evidence." *Clay v. Ford Motor Co.*, 215 F.3d 663, 672 (6th Cir. 2000). However, "while the district judge has a duty to intervene in appropriate cases, the jury's verdict should be accepted if it is one which could reasonably have been reached." *Conte*, 215 F.3d at 637 (quoting *Toth v. Yoder Co.*, 749 F.2d 1190, 1197 (6th Cir. 1984)).

Stryker's technical expert plausibly distinguished the claimed inventions from Zimmer's prior art references and explained why the claimed inventions would not have been obvious to one of ordinary skill in the art based on those references. Zimmer's bare disagreement with those distinctions does not mean the jury's verdict implicitly adopting them was against the great weight of the evidence. See, e.g., *Pregis Corp. v. Kappos*, 700 F.3d 1348, 1353-54 (Fed. Cir. 2012) (noting that, while the question of obviousness is ultimately one of law, the question of

what a reference teaches or whether a person of ordinary skill in the art would have been motivated to combine the teachings of separate references are questions of fact, entitled to deference). To the contrary, Stryker's expert on validity issues was clear, understandable, and convincing in his testimony. Consequently, Zimmer is not entitled to a new trial on the validity of any of the asserted claims.

C. Zimmer's Motion for JMOL of Non-Infringement of Claim 2 of the 329 Patent, or, in the Alternative, for a New Trial (doc. # 425)

Zimmer's next motion is for JMOL—or, alternatively, a new trial on the issue—of non-infringement of claim 2 of the 329 patent. The sole issue in the motion is whether, as a matter of law, the motor in the Pulsavac Plus devices is in the handle of the devices. At claim construction, the Court defined "handle" to mean "a portion of the device designed to be held by a hand or hands." (Mem. Op., doc. # 106, at 8-9.)

Zimmer's motion for JMOL of non-infringement is substantively identical to Zimmer's earlier motion for summary judgment of non-infringement on the same claim (doc. # 165). It raises the same arguments and relies on the same evidence. At summary judgment, the Court categorically dismissed those arguments and found that a "reasonable jury could conclude that the Pulsavac Plus devices include an electric motor in a part of the housing designed to be held by the hand or hands." (Order Denying Mot. for Summ. J. of Non-Infringement, doc. # 248, at 3.)

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The Court sees no reason to upset its earlier conclusions, especially in light of the testimony from multiple witnesses—including the designer of the Pulsavac Plus and the individual in charge of developing the Pulsavac Plus—that the battery in the Pulsavac Plus devices was in a part of the device designed to be held by the hand or hands. (See, e.g., May Dep. Tr., doc. # 458-5, at 6 (testimony of design engineer of Pulsavac Plus explaining that Pulsavac Plus was "designed to be held in multiple locations" and proceeding to demonstrate how "you can technically say [the portion of the Pulsavac Plus housing the motor] is a handle"); see also Trial Tr., doc. # 359, at 28-30 (testimony of Stryker's expert, Neil Sheehan, explaining how Pulsavac Plus meets "handle" limitation under Court's construction of that term)). That testimony affords an entirely legitimate basis from which a reasonable jury could conclude that the motor in the Pulsavac Plus devices was in the handle of the devices. As with practically all issues raised at trial, Zimmer presented some evidence suggesting the opposite conclusion. But that evidence was not so substantial or overwhelming as to render the jury's verdict on infringement of claim 2 categorically unreasonable, or even against the great weight of the evidence. See *Denhof v. City of Grand Rapids*, 494 F.3d 534, 543 (grant of new trial was inappropriate "where the case came down to a question of who the jury believed").

Zimmer's other objections—that Stryker's statements during prosecution of an earlier patent foreclosed its infringement claims in this case, and that Stryker is estopped from claiming infringement—were thoroughly

addressed and properly rejected at the summary judgment stage. (See Order Denying Mot. for Summ. J. of Non-Infringement, doc. # 248, at 3-5.) Nothing that has happened since summary judgment has affected the validity of the Court's decision.

D. Zimmer's Motion for JMOL Limiting Damages Under 35 U.S.C. § 287(a) and for a New Trial on the Issue of Patent Marking (doc. # 430)

Next, Zimmer argues that it is entitled to JMOL and a new trial because Stryker did not mark substantially all of the commercial embodiments of the patents-in-suit with the appropriate patent numbers. The patent marking statute provides that:

> Patentees . . . may give notice to the public that [a product] is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent, or by fixing thereon the word "patent" or the abbreviation "pat." together with an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent, or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of a failure so to mark, no damages shall be recovered by the patentee in any action for infringement,

> except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

35 U.S.C. § 287(a). Compliance with the marking statute does not require that a patentee mark every patented article with the corresponding patents. Rather, it suffices that "substantially all" of the patented articles are properly marked. *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1446 (Fed. Cir. 1998). Furthermore, as the patent marking statute suggests, when it is impracticable to mark the product itself, a patentee may comply with the marking statute by marking the patent numbers on the packaging for the product. See, e.g., *Sessions v. Romadka*, 145 U.S. 29, 50, 12 S. Ct. 799, 36 L. Ed. 609, 1892 Dec. Comm'r Pat. 382 (1892).

Zimmer urges that Stryker should not be permitted to recover damages from before December 10, 2010 (the day it filed suit in this matter) for four reasons: (1) it failed to mark any of its actual products with the numbers for the patents-in-suit; (2) it failed to provide evidence from which a reasonable jury could conclude that Stryker marked substantially all of its product labels with the numbers for the patents-in-suit; (3) it failed to mark, in any way, over 800,000 of its actual products with the numbers for the patents-in-suit; and (4) it failed to provide evidence from which a reasonable jury could find that Stryker marked substantially all of its products with the 383 and 807

patents before October 14, 2010, and with the 329 patent before August 14, 2006.

The Court addressed and rejected Zimmer's first and third arguments for JMOL at summary judgment. (Order, doc. # 246, at 5-8.) Zimmer has not come forward with any new arguments on either of those fronts, so there is no reason for the Court to revisit its earlier determinations.

Zimmer's second and fourth arguments for JMOL go to the sufficiency of the evidence Stryker presented at trial and, as such, were not addressed in the Court's earlier orders. Neither argument is meritorious however. Zimmer's second argument—that Stryker failed to produce evidence sufficient to convince a reasonable jury that it marked substantially all of its product labels with the numbers for the patents-in-suit—is belied by the record. Stryker employee Jan Haan, for example, testified to having personally reviewed hundreds of documents confirming that Stryker marked the appropriate patent number on the labeling of substantially all of its products during the period in question. (See, e.g., Trial Tr., doc. # 384, at 793-96, 803-05.) Zimmer objects that Haan's testimony did not distinguish between marking the product label and marking the carton label or the instructions for use. Not only does the case law fail to distinguish between marking one form of labeling as opposed to another for purposes of the marking statute, but a sampling of actual product labels from the period in question appears to confirm that Stryker marked the product labels, themselves, with the patent numbers. (See Def.'s Tr. Ex. AAU (copies of product labels for numerous

product codes, all showing appropriate patent numbers on the product label).) All of which is to say that there was enough evidence for a reasonable jury to conclude that Stryker marked substantially all of the product labels with the appropriate patent numbers.

Zimmer's remaining argument in support of its motion for JMOL is that Stryker failed to provide sufficient evidence of the date when it began marking its labels with the patents-in-suit. Specifically, it argues that no reasonable jury could have found, as did the jury in this case, that Stryker marked substantially all of its patented products with the 329 patent prior to August 14, 2006, and with the 383 and 807 patents prior to October 14, 2010, as there was no evidence at trial of the "date by which [Stryker] began to mark substantially all of its products." (Def.'s Br. in Supp., doc. # 431, at 12.) But the marking statute does not require Stryker to prove that it began marking products on a particular date. It only requires that, for the period for which it seeks damages, Stryker have marked substantially all of its products with the appropriate patent numbers. See *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1111 (Fed. Cir. 1996) (under marking statute, damages are computed from the time when the patentee "either began marking its products in compliance with section 287(a)[, constructive notice,] or when it actually notified [the accused infringer] of its infringement, whichever was earlier"). The relevant inquiry, then, is whether Stryker marked substantially all of its products with the 329 and 807 patents between December 10, 2004 and December 10, 2010, and whether it marked substantially all of its products with the 383 patent

between December 15, 2006 and December 10, 2010. The parties largely agree that, during those periods, Stryker marked roughly 99.52% of the relevant products with the 329 patent, 99.78% of the relevant products with the 807 patent, and 83.96% of the relevant products with the 383 patents. Although, as Zimmer argued at trial, a reasonable jury might conclude that those numbers did not amount to "substantially all" of the relevant products, it is equally true that a reasonable jury could conclude that, under the circumstances, each of those percentages rises to the level of "substantially all" products. See, e.g., *Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp.*, 616 F.3d 1357, 1374-75 (Fed. Cir. 2010) (affirming that marking 88-91% of all the commercial embodiments of a patent sufficed to satisfy the marking statute). Accordingly, Zimmer is not entitled to JMOL on marking.

That leaves Zimmer's motion for a new trial on the issue of marking. Zimmer asserts that the Court erred when it instructed the jury that, in deciding whether Stryker complied with the marking statute, the jury could consider "whether some portion of the Stryker products not marked with a particular patent number were marked with other related patent notices." (See Final Draft Jury Instructions, doc. # 377-1, at Instruction # 29.) An erroneous jury instruction warrants a new trial only if the party moving for a new trial establishes, *inter alia*, that the instructions were legally erroneous and that the instructions had a prejudicial effect on the jury. *Bettcher Indus. v. Bunzl USA, Inc.*, 661 F.3d 629, 638 (Fed. Cir. 2011); *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1311-12 (Fed. Cir. 2005).

In this case, Zimmer has not established that the challenged instruction was erroneous or that it had a prejudicial effect on the jury. As to whether the instruction was erroneous, Zimmer has not pointed to a single case holding that marking a product with a given patent is necessarily not an effective means of notifying other parties that the product is also covered by other, related patents from the same family as the patent with which the product is marked. To the contrary, in at least some circumstances, marking the product with a closely related patent would appear to provide reasonable persons with exactly the sort of constructive notice the patent marking statute is calculated to effect. See, e.g., *Ethicon Endo-Surgery, Inc. v. Hologic, Inc.*, 689 F. Supp. 2d 929, 945-46 (S.D. Ohio 2010) (noting "the [Supreme] Court's long-standing focus on the notice effected by the method of marking the patented article rather than on the precise mechanistic compliance with the statute."). Given the broad, functional reading courts have ascribed to the patent marking statute, the Court's instruction on marking was not so clearly erroneous.

Moreover, even if the Court's instruction was erroneous, Zimmer has not produced any evidence that the challenged instruction was prejudicial. To determine whether an instruction was prejudicial, a court must consider "the entirety of the proceedings, including the jury instructions as a whole." *Delta-X Corp. v. Baker Hughes Prod. Tools, Inc.*, 984 F.2d 410, 415 (Fed. Cir. 1993). Looking at Jury Instruction 29 in its entirety, it is clear the thrust of the instruction was that the jury should consider whether Stryker had shown, by a preponderance

of the evidence, that it marked its products in accordance with the patent marking statute. The instruction defined "marking" as "placing the word 'patent' or the abbreviation 'PAT' with the number of the patent on substantially all of the products it sold that included the patent invention." (Final Draft Jury Instructions, doc. # 377-1, at 42.) That is, almost verbatim, the language Zimmer insists in its motion the Court should have used. It is telling, moreover, that, at trial, Zimmer argued that the challenged language from Instruction 29 actually *helped* Zimmer's case. (See Trial Tr., doc. # 389, at 138 ("So Mr. Vogler's pointing to something he says helps him. It doesn't. It makes it worse.").) On balance, then, the whole of the instructions, together with Zimmer's own arguments from trial, make clear that the jury was not erroneously instructed in a way that prejudiced Zimmer. Thus, there is no basis for granting a new trial.

E. Zimmer's Motion for JMOL of No Willful Infringement (doc. # 447)

Zimmer's next motion is for JMOL of no willful infringement. "To establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its action constituted infringement of a valid patent." *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007). "[T]he patentee must also demonstrate that this objectively-defined risk . . . was either known or so obvious that it should have been known to the accused infringer." *Id.* Willfulness, then, consists of two elements: (1) an objective element that is often, but not always, a question

of law, and (2) a subjective element that is inherently a question of fact, to be decided by the jury. *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1007 (Fed. Cir. 2012).

Zimmer's motion raises several discrete issues, the first of which is whether Stryker presented any evidence at trial from which the jury could have concluded that Zimmer knew or should have known about the asserted patents. Zimmer suggests that Stryker did not, but its suggestion is belied by the record. For example, Stryker's expert, Neil Sheehan, testified that, "Zimmer knew about the patents in suit, and to the extent there are assertions that—I believe there's an assertion they didn't know about the 383. Well, they should have known. They are in the business. They should be looking at each other's patents. That's what people—that's what competitors do." (Trial Tr., doc. # 359, at 50-51.) Furthermore, as discussed above, Stryker presented ample evidence at trial that it marked substantially all of its products with the corresponding patents-in-suit, from which the jury could reasonably have inferred that Zimmer, as Stryker's chief—and, as a practical matter, only—competitor in the pulsed lavage market, either knew or should have known of the patents-in-suit well in advance of the litigation. That is especially true here, where Stryker also presented testimony from several members of Zimmer's design team that Zimmer instructed them to review Stryker's patented devices in designing the accused products. (See, e.g., Donizetti Dep., doc. # 458-3, at 3 (noting that Zimmer showed its design team a Stryker product as a model for developing the accused products); see also Trial Tr., doc.

388, at 14-19, 60-64 (referencing Zimmer's reliance on Stryker products in developing the accused products).) From this, as well, the jury could reasonably have inferred that Zimmer either knew or had reason to know of the patents-in-suit. (See also Def.'s Resp. to Interrog., doc. # 406-2, at 4 (admitting to knowledge of the 329 and 807 patents in 2000 and 2001, respectively).)

The next issue raised in Zimmer's motion is the relevance of Stryker's decision not to seek a preliminary injunction against Zimmer. Zimmer argues that Stryker is not entitled to enhancement of any damages it incurred after filing the suit, since it could have effectively prevented those damages in the first place by seeking a preliminary injunction at the time it filed. As support for its position, Zimmer cites the Federal Circuit's decision in *In re Seagate*, 497 F.3d 1360, 1375 (Fed. Cir. 2007), where that Court observed: "a patentee who does not attempt to stop an accused infringer's activities [by seeking a preliminary injunction] should not be allowed to accrue enhanced damages based solely on the infringer's post-filing conduct." Zimmer reads *Seagate* as setting an absolute bar on any enhancement of post-filing damages when the patentee does not seek a preliminary injunction. On closer inspection, though, *Seagate* does not bear that reading. For one thing, taken to its logical conclusion, Zimmer's position on *Seagate* would apply, not just to post-filing willfulness damages, but also to pre-filing willfulness damages. After all, following Zimmer's logic, Stryker could have protected itself by filing earlier and seeking a preliminary injunction right away. That result, however, would all but eliminate enhancement

of damages, in a way that no Federal Circuit case has suggested. Additionally, Zimmer's position presumes that Stryker's efforts to obtain a preliminary injunction would have been successful. But there is no such guarantee, particularly given Zimmer's dogged reliance on laches and other defenses. And the idea that Stryker could have prevented Zimmer's ongoing infringement by merely filing for a preliminary injunction is controverted by the fact that, even after Stryker prevailed on dozens of distinct motions and issues pre-trial, Zimmer refused to even modify, let alone halt, its infringing conduct. Thus, the idea that Stryker had it entirely within its power to cut off Zimmer's continuing infringement by means of a preliminary injunction is simply not borne out by the facts of this case. The Court is not inclined to read *Seagate* in a way that requires such counterintuitive results. The case is more naturally read for the proposition that a patentee's decision not to seek a preliminary injunction is relevant to, but not dispositive of, the issue of enhanced damages.

Having addressed Zimmer's two preliminary arguments in this motion, the Court turns to the first prong of the willfulness analysis—whether Zimmer's conduct was objectively reasonable. If an "accused infringer's position is susceptible to a reasonable conclusion of no infringement," the infringer's conduct cannot be objectively unreasonable. *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1374 (Fed. Cir. 2008). Zimmer's central argument on this point is that, because the Court did not grant Stryker's motions for summary judgment on the issues that went to trial, Zimmer's positions on those issues were, necessarily, reasonable.

In other words, Zimmer contends that since the Court determined that a reasonable jury might agree with Zimmer's view, Zimmer was not objectively unreasonable in holding that view. The flaw in Zimmer's argument is that there is a difference between an "objectively reasonable" position and a position with which a reasonable jury could agree. The bare fact that some jury, somewhere might adopt Zimmer's position does not mean Zimmer's position is objectively reasonable. See *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1337 (Fed. Cir. 2009) ("[T]he fact that an issue was submitted to a jury does not automatically immunize an accused infringer from a finding of willful infringement . . . ."). To the contrary, an action is objectively unreasonable if "the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent." *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

In this case, while it was conceivable that the jury could have accepted one or more of Zimmer's defenses, it was far from likely. For instance, at trial, the jury heard testimony that Zimmer all-but instructed its design team to copy Stryker's products. Along the same lines, Zimmer's lead engineer, Bill Donizetti, acknowledged Stryker's inventions to be "pioneering," suggesting they were novel and, therefore, non-obvious. On top of all that, Stryker's evidence regarding secondary considerations of non-obviousness made it dramatically less likely that Zimmer's invalidity arguments were reasonable. Specifically, Stryker clearly established that its inventions: (1) were a major commercial success; (2) solved a long-felt, unmet need to free up operating room space and replace

large capital equipment with a self-contained, disposable device; (3) were copied by others, including Stryker's two leading competitors; (4) were licensed by Davol; and (5) were praised by others, including Zimmer. (See Trial Tr., doc. # 384, at 25-28 (expert testimony on secondary considerations of non-obviousness); Trial Tr., doc. # 388, at 10-20 (same).) Given the considerable evidence that Stryker's patents were neither anticipated nor obvious, there was an objectively high likelihood that Zimmer's actions constituted infringement of Stryker's valid patents. While that high likelihood was not necessarily a certainty—and, thus, did not allow summary judgment on all of Stryker's claims—it was high enough to satisfy the requirements for objective willfulness.

On the subjective willfulness prong, substantial evidence supports the jury's finding that Zimmer willfully infringed Stryker's patents. In assessing whether infringement is subjectively willful under the totality of the circumstances, fact-finders should consider: (1) whether the infringer copied the patentee's commercial products; (2) whether the infringer presented evidence that it obtained opinions of counsel to justify its infringing actions; (3) whether the infringer attempted to avoid infringement by designing around the patents; and (4) whether the infringer acted in accordance with the standards of commerce. See *K-TEC v. Vita-Mix Corp.*, 696 F.3d 1364, 1378 (Fed. Cir. 2012); *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 698 (Fed. Cir. 2008); *Creative Internet Adver. Corp. v. Yahoo! Inc.*, No. 6:07-cv-354, 2009 U.S. Dist. LEXIS 65690, 2009 WL 2382132, at *2 (E.D. Tex., July 30, 2009). At trial, evidence of copying came

from Donizetti, who admitted that Zimmer instructed Donizetti's design team to model its design after features of Stryker's products. (See, e.g., Trial Tr., doc. # 358, at 126 ("Q: And you copied. I mean, you stated just a second ago you copied. A: Yes."); *id.* at 125 ("Q: That's what Zimmer copied from Stryker, isn't it? A: I guess you could say that.").) By contrast, Zimmer presented no evidence that it obtained the advice of counsel as to whether its accused products infringed Stryker's patents. Zimmer acknowledged at trial that it did not take any actions to stop selling the accused products, even after the Court found that Zimmer was infringing several claims of the patents-in-suit. And, finally, Zimmer offered no evidence that its behavior—copying a competitor's product, without attempting to design around the competitor's patents and without first seeking clearance from counsel on infringement concerns—was in keeping with standards of commerce in the medical device industry. All told, the jury had ample justification for finding, as a subjective matter, that Zimmer willfully infringed the patents-in-suit.

F. Zimmer's Motion for JMOL to Preclude Stryker from Receiving Lost Profits Damages and to Limit Stryker's Reasonable Royalty Recovery, or Alternatively for a New Trial on Damages (doc. # 453)

Zimmer's next motion for JMOL challenges the jury's decisions on damages. It includes five arguments for JMOL. First, Zimmer argues that Stryker's *nunc pro tunc* agreements were insufficient to confer standing on any of the Stryker plaintiffs in this suit. Next, Zimmer argues

that the jury erred in disregarding Zimmer's arguments that it could easily have offshored its manufacturing facilities and/or changed its infringing design to eliminate any possible infringement. Third, Zimmer argues that the jury's royalty base improperly included Zimmer's foreign sales revenue when it should have counted only domestic sales revenue. Fourth, Zimmer argues that the jury erred in calculating damages by basing its calculations on the entire value of the patented devices, since it should have calculated damages based solely on the value of the patented features. Finally, Zimmer argues that the jury's 25% royalty rate is unsupported by the evidence and "legally inappropriate." In the alternative, Zimmer argues that a new trial is warranted because the jury's damages findings were against the great weight of the evidence.

With respect to Zimmer's first JMOL argument, the Court has largely addressed Zimmer's standing arguments earlier in this Order and concluded that Stryker Sales Corporation had an exclusive license to market and sell the patented devices, such that it has standing to sue. See *supra* Part III.A. The only twist in Zimmer's argument this time around is Zimmer's pointing to a distribution agreement between Stryker Sales Corporation and Stryker Puerto Rico. (See PTX-125, doc. # 471-5.) True, the distribution agreement provides that "Stryker Corporation holds an exclusive right and exclusive sub-license to utilize [the patents-in-suit] . . . to market and sell Pulsed Lavage Products." (*Id.* at 3.) Other language in the agreement, however, makes clear that it excludes "Pulsed Lavage Products or any other products subject to any exclusive distribution agreement

between [Stryker Puerto Rico] and Stryker Corporation," including the products at issue in this case. (*Id.* at 2.) Indeed, the agreement expressly states that, "Nothing in this Agreement should be construed in a manner that controverts the exclusivity of Stryker Corporation's exclusive right and exclusive sub-license under the Pulsed Lavage Patents." (*Id.* at 3.) Thus, the distribution agreement does not change the Court's earlier finding that Stryker Sales Corporation had an exclusive sub-license to market and sell pulsed lavage devices practicing the patents in suit.

Stryker's other evidence of non-exclusivity is no more compelling. For example, the fact that Bruce Henniges happened to use the word "share" in describing the licensing arrangement between the Stryker plaintiffs is not legally significant for the simple reason that Henniges is not in a position to authoritatively interpret the agreements' terms. Likewise, the fact that Stryker's licenses may be revoked at any time does not make them any less exclusive in the absence of revocation. Zimmer has not identified, and the Court has not found, any cases suggesting otherwise. Zimmer has failed to show why the Stryker plaintiffs lack standing, as exclusive licensees, to pursue lost profits damages.

Zimmer's next argument is that the jury improperly disregarded Zimmer's two proposed non-infringing alternatives: (1) moving its manufacturing and sales operations overseas, or (2) utilizing a two-piece drain tube so as to avoid infringement. Zimmer's principal evidence of the viability of offshoring was: (1) Stryker's damages

expert, Catharine Lawton's testimony that companies make business decisions to move manufacturing locations "based on the opportunities and issues they face"; (2) Zimmer employee Joan Fishel's testimony that Stryker moved its Var-A-Pulse manufacturing operation from Ohio to North Carolina in 2001; and (3) a draft Zimmer strategic plan containing the words "Offshore/outsourcing manufacturing," but with the words "Offshore/outsourcing" crossed out. None of that evidence establishes that it was feasible for Zimmer to offshore its manufacturing and sales operations for the accused products. Indeed, the fact that the word "offshore/outsourcing" are crossed out in the strategic plan memo suggests exactly the opposite: that it was deemed impracticable for Zimmer to move manufacturing locations. That conclusion was buttressed by Fishel's testimony that offshoring "was never something that Zimmer wanted to do." (See Trial Tr., doc. # 387, at 151 (counsel for Stryker reading Fishel's testimony).)

In the face of the evidence suggesting that offshoring was not a viable alternative, Zimmer produced no concrete evidence that relocating its manufacturing centers would actually work. It never came forward with a plan for outsourcing, never said where it would relocate to, never said how much it would cost to offshore, and never said when it would have made the move. Zimmer did not have to go into exhaustive detail about its offshoring plans, but, to rely on offshoring as a defense in this case, it plainly must do more than merely declare that it could have moved its operations out of the country. The jury can hardly be blamed for rejecting a defense that has no

concrete evidentiary support. See *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1353 (Fed. Cir. 1999) ("Mere speculation or conclusory assertions will not suffice to overcome the inference [of impracticability that attaches to proposed non-infringing alternatives not actually implemented in the damages period].").

The same holds true with Zimmer's proposed design-around—using a two-piece drain tube, rather than the single-piece drain tube covered by the patents-in-suit. Because Zimmer only manufactured and sold a single piece drain tube, the law presumes that a two-piece drain tube was not commercially available. *Id.* Zimmer's attempts throughout the proceedings to prove that a two-piece drain tube was commercially available were largely unavailing. Zimmer first came forward with a two-piece drain tube concept as part of its damages expert's report. Reviewing the proposed design, Stryker's technical expert observed that it was unclear whether the proposed tube, as constructed by Zimmer, would even fit in the existing handpiece. (Trial Tr., doc. # 359, at 79-80.) Zimmer then proposed another two-piece drain tube, made by cutting the Pulsavac Plus suction tube approximately eight inches below the handpiece, then adding an external connector to re-connect the suction tube. (Trial Tr., doc. # 385, at 212-13.) When asked about the proposed design-around, however, Zimmer's own expert admitted that it was still a single piece drain tube and that, from an engineering vantage point, the proposed design around was not "a good decision." (Trial Tr., doc. # 387, at 49.) In short, Zimmer's evidence that a two-piece drain tube was a viable, non-infringing alternative to infringement was

far from overwhelming, and the jury could reasonably have concluded, from the record before it, that Zimmer's proposed design-around was not commercially feasible.

Zimmer's next JMOL argument is that the jury applied the wrong royalty base by including non-infringing sales from Zimmer's foreign affiliates to foreign end users. According to Zimmer, the jury should only have accounted for the value of Zimmer's sales from its Dover facility to its foreign affiliates, since the foreign sales are not covered by the Patent Act. What Zimmer's argument overlooks is that it is the manufacture of infringing products in this country—not just the sale of infringing products—that constitutes the infringement for which Stryker is entitled to damages "adequate to compensate for infringement." See 35 U.S.C. §§ 271(a), 284. Zimmer does not dispute that it manufactured its infringing products in America, nor does it dispute that it realized value from this infringement by selling its products both in the United States and abroad. The jury's decision to include the profits Zimmer realized abroad as a result of its domestic infringement was a reasonable way of ascertaining the value Zimmer ultimately realized from its infringement. The testimony of Stryker's damages expert, Catharine Lawton, confirmed as much and the jury was not unreasonable for adopting that testimony over Zimmer's competing account of damages calculations. See *Fujifilm Corp. v. Benun*, 605 F.3d 1366, 1372-73 (Fed. Cir. 2010) (inclusion of foreign revenue as part of royalty base is fundamentally a question of fact, to be decided by the jury).

Appendix D

Zimmer's fourth JMOL argument is that the jury wrongly based its damages calculations on the total value of the Stryker products, rather than on the value the patents-in-suit contributed to those products. Zimmer says that, under the "entire market value rule," the jury should only have considered the percentage of revenues or profits attributable to the patents, themselves, rather than to the whole product.

At the outset, Zimmer waived its "entire market value" argument by failing to propose a jury instruction on the rule at trial. See FED. R. CIV. P. 51(c); see also *Republic Tobacco Co. v. N. Atl. Trading Co., Inc.*, 381 F.3d 717, 733 (7th Cir. 2004) (appellant waived argument by failing to propose jury instruction on the subject of the argument). Because the jury had no way of knowing about the "entire market value rule," it cannot be faulted for failing to apply it. Even had the jury been apprised of the "entire market value rule," moreover, there is no basis for Zimmer's argument that the rule precludes the jury's royalty calculations in this case. The general rule is that royalties must be based on the value of the "smallest salable patent-practicing unit." *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012). What the smallest salable patent-practicing unit is appears to be a classic question of fact. Lawton explained in great detail at trial why the patents-in-suit could not be parsed out into individual components, but, rather, were inseparable elements of the whole pulsed lavage handpiece. (Trial Tr., doc. # 384, at 140 ("And all of these products, the tips and the splash shields and the tubing, it all functions together .... So all of these types of products

function together in a functional unit.") From Lawton's testimony, in particular, the jury had an ample basis from which to conclude that the smallest salable unit in this case was the pulsed lavage handpiece. Zimmer, by contrast, presented no evidence that the patents-in-suit could be separated from the handpieces, so as to be independent, saleable units. Thus, the jury was not unreasonable in deciding that the smallest salable patent-practicing unit here was the pulsed lavage handpiece as a whole, and using the value of the whole device in its royalty calculations.

Zimmer's final JMOL argument is that the jury's 25% royalty rate is unsupported by the record. There is, however, substantial evidence in the record from which the jury could have concluded that a 25% royalty rate was appropriate. For example, after a detailed analysis of the parties, the market for pulsed lavage devices, and the nature of the patents-in-suit, Lawton opined to the jury that the parties would have negotiated a royalty rate of 32.2%. (*Id.* at 199-217 (detailing basis for Lawton's royalty calculations).) That figure was not some arbitrary percentage; it was supported by evidence, referenced throughout the trial, all tending to show that Stryker's inventions had made it the dominant player in the pulsed lavage market, so that Zimmer was rapidly losing market share with its competing devices to the point that Zimmer was in danger of being forced out of the pulsed lavage market entirely. (See *id.* at 203-17.) Furthermore, testimony from Stryker's technical expert, Neil Sheehan, confirmed that Stryker's patents were difficult to design-around, so that a higher royalty would be expected. Finally, because Stryker and Zimmer were,

in effect, the only two competitors in the market, there was evidence that they would have preferred to maintain the exclusivity of their patented inventions. (*Id.* at 206-07.) From those facts, and based on her calculations of both parties' expected profits under various scenarios, Lawton determined that a 32.2% royalty was appropriate. That the jury ultimately departed downward from this figure does not make its ultimate decision arbitrary. See, e.g., *Spectralytics, Inc. v. Cordis Corp*, 649 F.3d 1336, 1346-47 (Fed. Cir. 2011) ("The jury was entitled to choose a damages award within the amounts advocated by the opposing parties."); *Monsanto Co. v. McFarling*, 488 F.3d 973, 979-81 (Fed. Cir. 2007), cert. denied, 552 U.S. 1096, 128 S. Ct. 871, 169 L. Ed. 2d 724 (2008) (affirming jury award of reasonable royalty rate in between parties' proffered royalty rates). More likely, it means that the jury rejected some of the advantages Lawton attributed to Stryker in her hypothetical negotiation. Whatever the jury's reasons, though, the fact remains that there was ample evidence from which the jury could have concluded that a 25% royalty rate was reasonable.

The last part of Zimmer's motion asks for a new trial on damages, arguing that the damges verdict is against the great weight of the evidence. Zimmer's argument, in essence, is that the cumulative effect of the jury's various errors in calculating damages warrants a new trial. For the reasons set out above, the Court does not agree that the jury's decisions were erroneous, especially not so erroneous as to warrant a new trial. Rather, the jury's findings on damages were supported by substantial evidence, making a new trial inappropriate.

Appendix D

G. Zimmer's Motion for a New Trial (doc. # 435)

Next is Zimmer's motion for a new trial. Zimmer argues that a new trial is warranted because: (1) the Court allowed Stryker to reference the Court's summary judgment rulings on infringement; (2) the Court prevented Zimmer from reciting to the jury the Court's statements on the reasonableness of some of Zimmer's positions; and (3) the Court instructed the jury to answer questions regarding remedies regardless of its finding on liability.

With respect to its first argument—that Stryker should not have been allowed to introduce evidence of the Court's rulings from summary judgment that Zimmer had infringed several of Stryker's claims—Zimmer understates the relevancy of the Court's earlier rulings. As the Court emphasized at trial, its prior rulings—referred to as the "litigation scorecard"—were necessary factual predicates to Stryker's argument that Zimmer did not change its marketing or sales position after various milestones in the litigation. (Trial Tr., doc. # 359, at 574-76.) In addition to serving as a factual predicate for Stryker's change of position argument, moreover, the litigation scorecard also buttressed Stryker's willfulness argument to the extent it showed Zimmer's infringement defenses to have been unreasonable. Because the litigation scorecard bears at least some connection to the reasonableness of Zimmer's defenses, it was properly before the jury.

Not only was the litigation scorecard relevant, but any prejudicial effect it might have had was minimal. To begin with, the issue summary chart—to which Zimmer

assented before trial—made it clear to the jury that the Court had decided most of the infringement claims in Stryker's favor prior to trial. (See Issue Summary Chart, doc. # 352-1, at 1.) Thus, Stryker's references to the Court's earlier references did not tell the jury anything it did not already know. If anything, referencing the Court's earlier infringement rulings was necessary to avoid confusing and help the jury understand why it was being asked to decide certain infringement questions but not others. Furthermore, the Court carefully explained in its jury instructions that its earlier rulings on some claims at summary judgment were in no way probative on the claims the jury was asked to decide. (See, e.g., Jury Instructions, doc. # 377-1, at 15 ("In deciding your infringement issue, do not use my infringement decisions to sway your decision in either direction.").) The Court thereby made clear to the jury that its previous rulings were only useful for purposes of framing the questions before the jury, not to suggest a particular answer to any of those questions. On balance, then, the relevance of the litigation scorecard substantially outweighed any prejudice from it.

Zimmer's second argument for a new trial is that the Court did not allow Zimmer to read to the jury the Court's statements on the reasonableness of some of Zimmer's positions. As the Court noted at trial, there are obvious problems with placing the Court in the position of a witness whose statements are to be read to the jury. Most notably, the Court is not subject to cross-examination, so introducing its statements is problematic from an evidentiary perspective. See FED. R. EVID. 605 (presiding

judge may not testify in trial as a witness). Moreover, because of the Court's role in directing the case, allowing the Court's statements into evidence runs the risk that the jurors will place undue emphasis on those statements, possibly to the exclusion of other relevant evidence.

Furthermore, the bare fact that Zimmer was unable to quote the Court's opinions to the jury did not necessarily prevent it from making its case. Just as Stryker pointed to the Court's earlier rulings as evidence of willfulness, Zimmer was also free to point out that the Court had expressly declined to grant summary judgment on the claims now before the jury, implying there were reasonable disputes about infringement on those claims. See, e.g., *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1235 (Fed. Cir. 2011) (defendant argued that district court's denial of plaintiff's "request for a preliminary injunction and the closeness of the inequitable conduct case indicate[d] that it did not act despite an objectively high likelihood of infringement"). Just as Stryker's witnesses expounded on the meaning of the Court's rulings, Zimmer's expert was free to opine on the reasonableness of Zimmer's arguments in light of the Court's refusal to grant summary judgment to Stryker on those claims. All of this was available to Zimmer without using the Court's own words. Thus, Zimmer cannot show that it was prejudiced from the Court's decision not to allow its own words into evidence, any more than Stryker was prejudiced by the Court's refusal to allow other language from the Court's opinions—much more favorable to Stryker—into evidence.

Appendix D

Zimmer's final argument for a new trial is that the Court erred in instructing the jury to answer questions of remedy regardless of its findings on infringement and invalidity. Zimmer argues that, in so doing, the Court implied to the jury that some sort of remedy was warranted in the case. But the Court's instructions did no such thing. Indeed, the jury was expressly instructed that the Court's asking them to answer questions of remedy in no way implied that they were to find against Zimmer. (Jury Instruction No. 25, doc. # 377-1, at 34 ("You should not interpret the fact that I am giving instructions about the plaintiff's damages as an indication in any way that I believe that the plaintiff should, or should not, win this case. I am instructing you on damages only so that you will have guidance to answer the questions on remedial issues for our use in the event plaintiff ultimately prevails.").) Courts in other patent cases routinely ask juries to answer such questions in exactly the manner the Court did. See, e.g., KEVIN F. O'MALLEY ET AL., FED. JURY PRAC. & INSTR. § 106:02 (6th ed.) ("The fact I have instructed you as to the proper measure of damages should not be considered as indicating any view of mine as to which party is entitled to your verdict in this case."). To suggest that the Court's instructions somehow prejudiced the jury is really just to say that the jury was incapable of listening to and following those same instructions.

Even if Zimmer could show some prejudice from any or all of the alleged errors, moreover, that prejudice would not rise to the level necessary to grant a new trial. See, e.g., *Brooks v. Toyotomi Co., Ltd.*, 86 F.3d 582, 588 (6th Cir. 1996) ("A court should refrain from interfering with

a jury's verdict unless it is clear that the jury reached a seriously erroneous result. The simple fact that a grant of a new trial might result in a different outcome is not a valid basis for disturbing a jury's verdict which is otherwise based upon legally sufficient evidence."). In this case, the evidence overwhelmingly favored Stryker, a fact reflected in the one-sidedness of the jury's verdict and the proceedings leading up to it. Zimmer has not suggested any reason for thinking that Stryker's evidence at trial—even without the evidence Zimmer challenges in its motion for a new trial—was legally insufficient to support the jury's verdict. On those facts, a new trial is simply not warranted.

H. Zimmer's Motion for Judgment Barring Pre-Suit Damages Under the Defense of Laches (doc. # 418)

Zimmer's final motion is for judgment barring pre-suit damages under the equitable defense of laches. Zimmer argues that Stryker knew of the infringing Pulsavac Plus products at least as early as 2000, and that Stryker's delay in filing suit against Zimmer until 2010 resulted in the loss or destruction of evidence that would have been valuable to Zimmer's defense. Zimmer brings its motion under Rule 52(c), which addresses judgment on partial findings. Although, by its terms, Rule 52(c) applies only to bench trials, because Zimmer's laches defense deals with a question of equity, and because the jury was therefore not allowed to consider laches at trial, the Court may properly address it here. In considering whether to grant judgment under Rule 52(c), the district court applies the

same standard of proof and weighs the evidence as it would at the conclusion of a bench trial.[2] That, in turn, means the court does not view the evidence through a particular lens or draw inferences favorable to either party. See *Ritchie v. United States*, 451 F.3d 1019, 1023 (9th Cir. 2006). Moreover, the court is free to make findings on the issue in accordance with its own view of the evidence. See *id.* A court's fact-finding authority under Rule 52(c) is limited, however, by the fundamental principle that, on issues presented to the jury, the court may not make a finding contrary to a jury-found fact. See *Beacon Theatres, Inc. v. Westover*, 359 U.S. 500, 508-10, 79 S. Ct. 948, 3 L. Ed. 2d 988 (1959).

To succeed on a laches defense, an accused infringer must ordinarily show that (1) the patentee delayed in filing the suit for an unreasonable length of time, and (2) that the delay actually prejudiced the alleged infringer. *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1032 (Fed. Cir. 1992). Actual prejudice may be either economic or evidentiary. *Id.* at 1033. Economic prejudice exists only when the accused infringer changes its economic position as a result of the patentee's delay in filing suit. *Gasser Chair Co. v. Infanti Chair Mfg. Corp.*, 60 F.3d 770, 775 (Fed. Cir. 1995). Evidentiary prejudice arises only where the defendant is unable "to present a full and fair defense on the merits." *A.C. Aukerman Co.*, 960 F.2d at 1033. Even when an accused infringer shows undue delay and some form of actual prejudice, however,

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2. Both parties elected to rely only on the evidence presented to the jury for this defense.

the Court still has discretion to decide against finding laches. *Id.* at 1036 (emphasizing that laches is, at bottom, a discretionary doctrine).

At summary judgment, the Court considered and denied most of the laches arguments Zimmer now raises, specifically finding that Zimmer had not made the required showing of evidentiary prejudice. (See Order Denying Mot. for Summ. J. Barring Pre-Suit Damages Pursuant to Defense of Laches, doc. # 251.) Zimmer nevertheless insists that it is now entitled to laches because, at trial, Stryker took advantage of Zimmer's inability to produce the lost or destroyed evidence. Stryker's conduct at trial, Zimmer says, established precisely the sort of evidentiary prejudice that supports a grant of laches. The Court disagrees and finds, as a matter of fact, that Zimmer did not suffer evidentiary prejudice attributable to any delay by Stryker.

Zimmer argues it was prejudiced because it could not show certain devices and documents to the jury, as those documents were allegedly lost or destroyed before Stryker filed suit. At trial, however, Zimmer's witnesses testified in detail about those same devices and the subject matter of those same documents, introduced photographs of allegedly destroyed devices, and otherwise demonstrated for the jury the content of the evidence they could not procure directly. (See, e.g., Trial Tr., doc. # 386, at 179 (introducing photograph of allegedly destroyed Pulsavac I device in the course of Zimmer's technical expert's trial testimony).) Because Zimmer was able to thoroughly convey to the jury the information it would

have conveyed had it had access to the allegedly lost or destroyed evidence, Zimmer cannot credibly argue that the alleged loss of evidence materially prejudiced its case. And without such a showing of prejudice, laches is inappropriate. *Cleveland Newspaper Guild, Local 1 v. Plain Dealer Publ'g Co.*, 839 F.2d 1147, 1153 (6th Cir. 1988) (laches requires showing of actual prejudice).

Laches is doubly inappropriate here given the volume of documentary and testimonial evidence Zimmer otherwise compiled for this case—almost twenty hours of witness testimony and thousands upon thousands of pages of documents. As the Court observed in denying Zimmer's motion for summary judgment on the basis of laches: "The sheer size of the record in this matter belies the claim that Zimmer's defense might fail for want of additional information. More importantly, the record does not disclose any critical evidentiary gap for Zimmer that is fairly traceable to Stryker's alleged delay." (Order Denying Mot. for Summ. J. Barring Pre-Suit Damages Pursuant to Defense of Laches, doc. # 251, at 8.) What was true before trial remains true now. The Court concludes, therefore, that Zimmer has not shown evidentiary prejudice sufficient to warrant a grant of laches.

Zimmer raises one genuinely new argument in its Rule 52(c) motion, an argument not addressed in the Court's summary judgment order (doc. # 251). Zimmer's new argument is that, had Stryker sued sooner, Zimmer would have considered and implemented potential design-arounds, saving it time and money. That argument has both an evidentiary and economic aspect to it. In terms

of establishing evidentiary prejudice, Zimmer might be suggesting that, had Stryker forced it to consider and implement the design-arounds, then, at trial, Zimmer could have pointed to its attempts to implement the design-arounds as evidence of their feasibility. In other words, because Stryker did not force Zimmer to implement the design-arounds, Zimmer has no evidence that the design-arounds were feasible. That argument fails because nothing about it suggests that any evidence was actually lost or destroyed as a result of Stryker's delay in bringing suit. At trial, Zimmer remained free as ever to explain the feasibility of its potential design-arounds and, indeed, it did so on several occasions—not just at trial, but in a number of its filings. Moreover, there was nothing to prevent Zimmer from implementing the design-arounds before Stryker brought the suit. In that sense, the fact that Zimmer lacks evidence of the feasibility of the design-arounds can hardly be blamed on Stryker.

Alternatively, Zimmer's argument about design-arounds might be viewed as an argument showing economic prejudice, *i.e.*, that Zimmer forewent a less costly alternative because Stryker did not sue for infringement. That argument fails for several reasons. Most obviously, there is no evidence that Zimmer actually would have resorted to its proposed design-arounds had Stryker sued at an earlier date (see *infra*). Indeed Zimmer's position in this litigation—that Stryker's patents are invalid and unenforceable—suggests it would not have sought to completely overhaul its products or productions systems to avoid infringing those patents. Had Zimmer seriously contemplated implementing the design-arounds, moreover,

it could have done so after Stryker filed this lawsuit, thereby avoiding possible liability for supplemental damages. The fact that Zimmer did nothing to alter the infringing products or their manufacture after Stryker filed this lawsuit suggests that it has not seriously contemplated the proposed design-arounds. Granting laches on the basis of those design-arounds would, therefore, be inequitable. See *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1371-72 (Fed. Cir. 2001) (defendant's firm belief that its product was non-infringing, coupled with continuation of infringing conduct after being contacted by patentee, demonstrated lack of economic prejudice); *James River Corp. v. Hallmark Cards*, 915 F. Supp. 968, 978 (E.D. Wis. 1996) ("An infringer's continuation of infringing activity is probative of a lack of prejudice.").

Finally, also with respect to Zimmer's proposed design-arounds, the jury's award implicitly rejected Zimmer's claim that its proposed design-arounds would have saved it from infringement. At trial, Stryker asked for $70 million in lost profit damages. Zimmer argued that figure was excessive because it could have avoided infringement at any time by implementing its proposed design-arounds. The jury's decision to award Stryker all the lost profit damages it sought implies that it totally rejected Zimmer's proposed design-around defense. Thus, there is simply no basis for granting Zimmer's laches argument based on the availability of its proposed design-arounds. As Zimmer has established neither economic nor evidentiary prejudice, it is not entitled to prevail on its Rule 52(c) motion for judgment based on the defense of laches.

After thoroughly reviewing each of Zimmer's ten post-trial motions, the Court finds no basis for departing from the jury's verdict. In light of the evidence presented at trial, the jury reached a reasonable result, one the law does not empower this Court to disturb.

III. STRYKER'S POST-VERDICT MOTIONS

Stryker is entitled to prevail on each of its five post-verdict motions.

A. Motion for a Permanent Injunction or, in the Alternative, an Ongoing Royalty (doc. # 396)

Stryker's first motion is to permanently enjoin Zimmer from manufacturing the infringing Pulsavac Plus devices, to the extent those devices infringe the 807 patent.[3] At summary judgment, the Court found that the accused Pulsavac Plus devices infringed the 807 patent, and, at trial, the jury rejected Zimmer's validity challenge. Thus, the only issue here is remedy.

A court "may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable." 35 U.S.C. § 283. A patentee is entitled

3. The injunction Stryker seeks does not cover infringement of the 329 and 383 patents because both of those patents expired earlier this year.

to a permanent injunction where: (1) it has suffered an irreparable injury; (2) remedies available at law, such as money damages, are inadequate to compensate for that injury; (3) a remedy is warranted in light of the balance of hardships between the plaintiff and defendant; and (4) the public interest would not be disserved by a permanent injunction. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391, 126 S. Ct. 1837, 164 L. Ed. 2d 641 (2006). The Federal Circuit has acknowledged "the long tradition of equity practice granting injunctive relief upon a finding of infringement in the vast majority of patent cases." *Presidio Components, Inc. v. Am. Technical Ceramics Corp.*, 702 F.3d 1351, 1362 (Fed. Cir. 2012).

1. Irreparable Injury

Zimmer's infringement has harmed—and continues to harm—Stryker by depriving it of market share and diminishing Stryker's right to exclude others from practicing its patents, all to the direct and immediate advantage of Stryker's only major competitor in the orthopedic pulsed lavage market (Zimmer). As to the first of these sources of harm, the record establishes by a preponderance of the evidence that Zimmer's sale of infringing products costs Stryker between 15-18% market share. (See, e.g., PTX-166 Excerpts, doc. # 465-5, at 3 (showing loss of market share).) Loss of market share to an infringer is a textbook example of irreparable harm. See *Presidio Components, Inc.*, 702 F.3d at 1363 ("This [loss of market share] squarely supports a finding of irreparable harm."); *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 861 (Fed. Cir. 2010) ("Past harm to a patentee's

market share, revenues, and brand recognition is relevant for determining whether the patentee 'has suffered an irreparable injury.'"). The loss is all the more significant in this case because Stryker has demonstrated a reluctance to license its patented technologies to competitors. See *Presidio Components, Inc.*, 702 F.3d at 1363 ("The district court correctly found Presidio's unwillingness to license favored finding irreparable injury."). While it is true that Stryker did grant Davol a limited license to practice the 329 patent,[4] the record discloses no license to practice the 807 patent at issue on this motion. Thus, Zimmer's infringement of the 807 patent did not just deprive Stryker of significant market share, but it did so using technology that Zimmer could not otherwise obtain.

On top of all that, both parties recognize that the orthopedic pulsed lavage market consists, for practical purposes, of just two players: Stryker and Zimmer. (See,

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4. The license was limited in two ways. First, it was limited in the sense that Davol is not a significant player in the orthopedic pulsed lavage market, so any competition with Stryker would, as a practical matter, be minimal. (See Trial Tr., doc. # 385, at 168-69 (Zimmer representative testifying that Davol does not compete effectively in the orthopedic area).) Second, the license was limited because it expressly restricted Davol to practicing the patent in devices with batteries *in* the handpiece. (See Trial Tr., doc. # 387, at 127 (Zimmer's damages expert testifying that the Davol license restricted Davol to selling the device with batteries in the handpiece).) Stryker's primary market is for pulsed lavage devices with batteries *outside* the handpiece. (See, e.g., Trial Tr., doc. # 387, at 134 (Stryker's damages expert testifying that 90% of Stryker's pulsed lavage sales are for devices with batteries outside the handpiece).)

e.g., Trial Tr., doc. # 385, at 168-69 (testimony from Zimmer brand manager acknowledging that Stryker and Zimmer are the two major competitors in the orthopedic pulsed lavage device market).) Those two companies are fiercely competitive with one another because, in a two player industry, one player's gain is almost invariably the other player's loss. For that reason courts have consistently treated infringement by a direct competitor as an important factor favoring a finding of irreparable harm. See, e.g., *Presidio Components, Inc.*, 702 F.3d at 1363-64 ("Direct competition in the same market is certainly one factor suggesting strongly the potential for irreparable harm without enforcement of the right to exclude."). In this case, there is no doubt that Zimmer's infringement not only cost Stryker market share and deprived it of the exclusive use of proprietary technology, but that it directly benefitted Stryker's only rival in the orthopedic pulsed lavage industry. That is more than enough to establish irreparable injury.

Zimmer makes two arguments as to why its ongoing infringement does not irreparably harm Stryker, but neither argument is availing. Zimmer's first argument is that Stryker's alleged delay in seeking injunctive relief—by, for example, not seeking a preliminary injunction at the outset of this action—shows that Stryker has not suffered irreparable harm. But the Federal Circuit has "never held that failure to seek a preliminary injunction must be considered as a factor weighing against a court's issuance of a permanent injunction." *Mytee Prods., Inc. v. Harris Research, Inc.*, 439 Fed. App'x 882, 888 (Fed. Cir. 2011). Indeed, there is no obvious reason why it should be

considered. To the contrary, an infringer's past successful infringement should not become a sort of de facto license to continue infringing. Infringement does not cease to be a problem just because the patent holder has not pursued a particular remedy.

Zimmer's other argument against finding irreparable harm is that Stryker has not shown that Zimmer's infringement of the 807 patent is what caused Stryker to lose market share. The premise of Zimmer's argument is that the 807 patent only covers a component of a pulsed lavage device, so that demand for the device might be driven by something other than demand for the component covered by the 807 patent. That premise is plainly flawed, since, by its express terms, the 807 patent covers the entire pulsed lavage handpiece. (See 807 Patent, doc. # 470-2, at 34 (disclosing "An irrigating handpiece for receiving a tip assembly having a discharge tube and a suction tube, said irrigating handpiece including . . .").) As a result, demand for the 807 patent technology is inextricably linked to demand for the whole handpiece. At trial, Zimmer made the same flawed argument to the jury as one basis for rejecting Stryker's damage theory. The verdict demonstrates that the jury also rejected Zimmer's theory. Zimmer's attempt to parse the 807 patent into separable components, and thereby negate Stryker's claim of irreparable injury, must therefore fail.

2. Inadequacy of Remedies at Law

Courts have consistently recognized that the financial harm accompanying loss of market share to an

adjudged infringer is inherently difficult to quantify, so that damages will seldom be an adequate remedy. See, e.g., *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 861 (Fed. Cir. 2010) (monetary loss from loss of market share "is particularly difficult to quantify"). Likewise, because the right to exclude others from using a patented invention has value in and of itself, independent of its impact on the patentee's financial statements, monetary damages tend to be an inadequate remedy for continued infringement. *Presidio Components, Inc.*, 702 F.3d at 1363 ("[The] historical practice of protecting the right to exclude through injunctive relief is not surprising given the difficulties of protecting this right solely with monetary relief."). For those reasons, money damages will not adequately compensate Stryker for Zimmer's infringement.

Zimmer argues that, because the jury awarded Stryker damages for past infringement, damages must also be a suitable remedy for future infringement. By that reasoning, any award of damages for past infringement would militate against injunctive relief for future infringement. This Court cannot sanction an approach so at odds with Federal Circuit precedent. See, e.g., *Atlas Powder Co. v. Ireco Chems.*, 773 F.2d 1230, 1233 (Fed. Cir. 1985) ("While monetary relief is often the sole remedy for past infringement, it does not follow that a money award is also the sole remedy against future infringement.").

3. Balance of Hardships

The balance of hardships in this case also favors granting Stryker's request for an injunction. Denying

Stryker's motion would force Stryker to compete against its own technology, an outcome that "places a substantial hardship on [the patentee]." *Robert Bosch, LLC*, 659 F.3d at 1156. By contrast, the only hardship Zimmer would face from an injunction would be having to stop infringing, something the law does not treat as a legitimate hardship. *i4i Ltd. P'ship*, 598 F.3d at 863 ("[N]either commercial success, nor sunk development costs, shield an infringer from injunctive relief.").

4. Public Interest

The public interest also weighs in favor of granting a permanent injunction. The public has a strong interest in maintaining the integrity of the patent system by enforcing a patent owner's right to exclude. See *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 704 (Fed. Cir. 2008) (acknowledging district court's conclusion that "it is generally in the public interest to uphold patent rights"); *Smith & Nephew, Inc. v. Synthes*, 466 F. Supp. 2d 978, 985 ("As a general matter, the public maintains an interest in protecting the rights of patent holders, and injunctions serve that interest."). Without an injunction, there is every reason to believe that Zimmer will continue violating Stryker's right to exclude, undermining the policies that underlie the patent laws.

Zimmer counters that an injunction is contrary to the public interest because Stryker will probably raise prices on its pulsed lavage devices if Zimmer's infringing products are forced off the market. At the outset, Zimmer's argument is purely speculative. There is no

concrete evidence that Zimmer's exit from the market will inevitably cause Stryker to increase prices for its pulsed lavage devices. Even taking Zimmer's speculation as true, moreover, Zimmer's argument proves too much. Every patent is a form of limited monopoly power from an economic perspective, but Congress has made the judgment that the value of the patent system outweighs whatever temporary monopoly profit may accrue to the patent holder. The Federal Circuit has repeatedly suggested that any potential short-term price reductions that infringement may trigger are usually outweighed by the long-term costs of infringement, including diminished incentives to invent and erosion of respect for the patent laws. See, e.g., *Edwards Lifesciences AG v. CoreValve, Inc.*, 699 F.3d 1305, 1314 (Fed. Cir. 2012) ("The innovation incentive of the patent is grounded on the market exclusivity whereby the inventor profits from his invention.").

5. Timing of the Preliminary Injunction

Since all four injunction factors support granting Stryker's motion for a permanent injunction, it is clear that Zimmer should be permanently enjoined from producing or selling infringing products. The only remaining question is whether the injunction should be stayed until some future date. The Court may exercise its discretion to stay an injunction by considering: (1) whether Zimmer made a strong showing that it is likely to succeed on the merits; (2) whether Zimmer will be irreparably injured absent a stay; (3) whether the issuance of a stay will substantially injure Stryker; and (4) whether delaying

the stay is in the public interest. *Hilton v. Braunskill*, 481 U.S. 770, 776, 107 S. Ct. 2113, 95 L. Ed. 2d 724 (1987).

None of the four considerations for staying an injunction supports doing so here. Zimmer is unlikely to succeed on its argument that the 807 patent is invalid, for all the reasons that prompted the Court to reject that same argument at summary judgment and that prompted the jury to reject it at trial. (See Order Denying Zimmer's Motion for Summary Judgment of Invalidity, doc. # 249; Verdict, doc. # 381, at 2-3.) As noted above, an immediate injunction will only injure Zimmer to the extent Zimmer will no longer be allowed to infringe Stryker's patents, something it had no right to do in the first place. By contrast, staying the injunction means that Stryker will continue to lose market share to Zimmer and will continue to be deprived of its right to exclude others (especially its chief competitor) from practicing its patents. Lastly, the public's interest in enforcing the patent laws favors giving the injunction immediate effect in this case. For those reasons, Zimmer must be immediately and permanently enjoined from manufacturing, marketing, or selling any products found to have infringed the 807 patent, including the infringing Pulsavac Plus products.

B. Motion for Supplemental Damages (doc. # 414)

The jury's $70 million lost profits award to Stryker only reflected the damages Stryker had suffered through November 30, 2012. That is because, at the time of trial, Zimmer's most up-to-date sales data only stretched through November 30, 2012. Zimmer has now produced

supplemental sales data for its infringing products, reflecting sales from December 1, 2012 through Feburary 28, 2013. Based on that supplemental data, Stryker's damages expert has calculated Stryker's additional lost profits for that time frame to be $2,351,257.66. Stryker now asks for an award of supplemental lost profits damages in that amount.

The patent damages statute provides that a patentee is entitled to "damages adequate to compensate for [] infringement," including damages for sales not accounted for at trial, such as post-verdict sales. 35 U.S.C. § 284; see *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1213 (Fed. Cir. 2011) ("[A] patentee is not fully compensated if the damages award did not include future lost sales."). Zimmer concedes as much, but denies that Stryker is entitled to supplemental damages in this case because, it says, the jury's award is not supportable. Zimmer's arguments as to why the jury's award is not supportable are the same ones it made it made in its Post-Trial Motion No. 8 on Damages (doc. # 454). The same reasons that compelled the Court to reject those arguments in addressing Zimmer's Post-Trial Motion No. 8 on Damages compel the Court to reject them here, as well. The methodology underlying Stryker's supplemental damages calculations is not unreasonable, just as it was not unreasonable at trial. (See Ex. B, doc. # 415-2 (setting out updated damage schedules).) Therefore, consistent with the text of the patent damages statute, the Court grants Stryker's motion for supplemental lost profit damages in the amount of $2,351,257.66.

C. Motion for Finding of Exceptional Case and for an Award of Attorneys' Fees (doc. # 410)

Stryker's next motion is for an award of attorneys' fees under 35 U.S.C. § 285. Section 285 provides that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." Determining whether to award attorneys' fees under § 285 is a two-step process. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 687 F.3d 1300, 1308 (Fed Cir. 2012). "First, [the] prevailing party must establish by clear and convincing evidence that the case is 'exceptional.'" *Id.* "Second, if the case is deemed exceptional, a court must determine whether an award of attorneys' fees is appropriate." *Id.*

There are no ironclad rules for what makes a case "exceptional." The Federal Circuit, for example, has said that "[a] case may be deemed exceptional under § 285 where there has been willful infringement, fraud or inequitable conduct in procuring the patent, misconduct during litigation, vexatious or unjustified litigation, conduct that violates Federal Rule of Civil Procedure 11, or like infractions." *MarcTec, LLC v. Johnson & Johnson*, 664 F.3d 907, 916 (Fed. Cir. 2012). Even if a case is found to be exceptional, moreover, the law gives courts considerable discretion in deciding whether to award attorney's fees. See *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 670 F.3d 1171, 1191-92 (Fed. Cir. 2012).

Stryker argues that this case is "exceptional" for two reasons. First, it says that Zimmer's willful infringement was so pronounced as to warrant a finding of an

exceptional case. Second, it says that Zimmer's conduct of the litigation was so unreasonable and vexatious as to warrant a finding of an exceptional case. The Court need only address Stryker's first argument to find this case "exceptional." While it is true willful infringement does not *require* a finding of an exceptional case, "[d]istrict courts have tended to award attorneys' fees when willful infringement has been proven, and [the Federal Circuit] has uniformly upheld such awards." *S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 200 (Fed. Cir. 1986). Here, the Court and the jury both found, by clear and convincing evidence, that Zimmer willfully infringed the 329, 807, and 383 patents. (See, e.g., Verdict, doc. # 381, at 6-7.) That is sufficient to support a finding of an exceptional case. *Modine Mfg. Co. v. Allen Grp., Inc.*, 917 F.2d 538, 543 (Fed. Cir. 1990) ("An express finding of willful infringement is a sufficient basis for classifying a case as 'exceptional,' and indeed, when a trial court denies attorney fees in spite of a finding of willful infringement, the court must explain why the case is *not* 'exceptional' within the meaning of the statute.") (emphasis in original).

Having found this case to be "exceptional," the Court must consider whether to award attorneys' fees. The decision on attorney's fees is left largely to the Court's discretion. *Bard Peripheral Vascular, Inc.*, 670 F.3d at 1191-92. Exercising that discretion, the Court concludes that an award of attorneys' fees is appropriate in this case, based on the principles animating § 285. In particular, § 285 is meant to prevent the waste of judicial resources that comes from willful infringement and the oftentimes unnecessary litigation it engenders. *Univ. of Pittsburgh*

v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 U.S. Dist. LEXIS 58156, 2012 WL 1436569, at *8-*9 (W.D. Penn. Apr. 25, 2012). By pursuing this action, Zimmer has forced Stryker and this Court to expend considerable resources in the name of a case that, for the most part, was not terribly close.[5] That is the essence of the harm that § 285 was designed to remedy. See *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1582 (Fed. Cir. 1992) ("The statutory purpose of such award is to reach cases where the interest of justice warrants fee-shifting."); *Central Soya Co., Inc. v. Geo. A. Hormel & Co.*, 723 F.2d 1573, 1578 (Fed. Cir. 1983) ("The purpose of § 285 is, in a proper case and in the discretion of the trial judge, to compensate the prevailing party for its monetary outlays in the prosecution or defense of the suit."). Accordingly, the Court awards Stryker its reasonable attorneys' fees.

D. Motion for Prejudgment Interest (doc. # 399)

Stryker's fourth motion is for prejudgment interest on: (1) the $70 million in lost profit damages the jury awarded it; (2) the $2,351,257.66 in supplemental damages the Court awards it (see Part III); and (3) its reasonable attorneys' fees (see Part IV). The patent damages statute provides that, "Upon finding for the claimant,

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5. This is in no way a comment on the quality of Zimmer's counsel's advocacy throughout these proceedings. Counsel for Zimmer has consistently made the best of a bad case, presenting arguments that were lucid and thoughtful. The problems with Zimmer's positions lie not in the quality of counsel's advocacy, but in the flagrancy of Zimmer's underlying infringement. No advocate could rescue Zimmer from that problem.

the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. § 284. "In the typical case an award of prejudgment interest is necessary to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement." *General Motors Corp. v. Devex*, 461 U.S. 648, 655, 103 S. Ct. 2058, 76 L. Ed. 2d 211 (1983). This is because "[a]n award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also of the foregone use of the money between the time of infringement and the date of the judgment. *Id.* at 655-56. Despite that, an award of prejudgment interest is not mandatory. "For example, it may be appropriate to limit prejudgment interest, or perhaps even deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit." *Id.* at 657.

Zimmer argues that Stryker's undue delay in bringing this action justifies denying Stryker prejudgment interest. At the outset, it is not at all clear that Stryker's delay was "undue." For example, although some low level Stryker employees tested the allegedly infringing products in 2000, there is no evidence that anyone at Stryker with a knowledge of that company's patents knew of the infringing devices before 2005, by which time Stryker was on the verge of receiving additional patent protection (the '383 patent). Less than two years later, Zimmer recalled

its infringing products, shut down its manufacturing facilities, and abandoned the market until December of 2008, during which time there was no reason for Stryker to pursue an infringement claim. For those reasons, Stryker's delay in bringing this suit is not necessarily undue, as Zimmer assumes.

Furthermore, no court has ever said that any kind of delay in filing suit *requires* a denial of prejudgment interest. See, e.g., *Devex*, 461 U.S. at 657 ("[I]t *may* be appropriate to limit prejudgment interest, or perhaps even deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit.") (emphasis added). Quite the opposite, courts have routinely noted that denial of prejudgment interest is the exception, not the rule, because denying prejudgment interest thwarts § 284's overriding aim of affording patent holders complete compensation. See, e.g., *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 967 (Fed. Cir. 1986) ("The normal procedure under *Devex* is to award prejudgment interest from the date of infringement to the date of payment, since only such award will satisfy 'Congress' overriding purpose [in section 284] of affording patent owners complete compensation.'") (quoting *Devex*, 461 U.S. at 655); *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1574 (Fed. Cir. 1996) ("[P]rejudgment interest is the rule, not the exception."). There must be something exceptional about Stryker's delay, therefore, to justify denying it prejudgment interest.

One thing that could make a delay in filing suit "exceptional" would be if the delay actually harmed the

infringer. Indeed, in the vast majority of cases where courts have declined to award prejudgment interest, they appear to have done so either because the plaintiff's delay in filing suit prejudiced the defendant or because the plaintiff harmed the court and the defendant by failing to comply with court orders after filing the suit. See, e.g., *Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1362 (Fed. Cir. 2001) (prejudgment interest denied because plaintiff engaged in self-serving litigation tactics that prejudiced defendant); *Minemyer v. R-Boc Representatives, Inc.*, No. 07-C-1763, 2012 U.S. Dist. LEXIS 87915, 2012 WL 2423102, at *3 (N.D. Ill. June 26, 2012) (prejudgment interest denied where plaintiffs failure to comply with court orders caused three year delay of trial). But where the infringer is not prejudiced by the patentee's delay in filing suit and the patentee proceeded responsibly after filing suit, it is difficult to discern a good reason to deny prejudgment interest, especially given § 284's compensatory aim. After all, the delay does not harm the infringer financially. To the contrary, the principal financial consequence of a patentee's delay in filing suit is that the infringer gets to keep and make use of the proceeds from infringement for a longer period of time. See *In the Matter of Mahurkar Double Lumen Hemodialysis Catheter Patent Litig.*, 831 F. Supp. 1354, 1394 (N.D. Ill. 1993). Thus, unless there is some legitimate reason to punish the patentee for its delay in filing suit—as, for example, where the patentee's delay unduly prejudices the infringer—the Court sees no reason to withhold prejudgment interest. As Zimmer has not demonstrated that Stryker's delay in filing suit prejudiced it in any meaningful way, prejudgment interest is appropriate here.

That leaves two questions. First, at what rate should prejudgment interest be calculated? The case law makes clear that determining the appropriate rate is largely left to the Court's discretion. See, e.g, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 939 F.2d 1540, 1545 (Fed. Cir. 1991) ("A trial court is afforded wide latitude . . . and may award interest at or above the prime rate."). In this case, Stryker has proposed that interest be awarded at a rate of 3.83%, reflecting Stryker's weighted-average interest rate, excluding required fees, for all its borrowing during the damages period. The Court believes that rate is a reasonable one, insofar as it fairly accounts for what Stryker has shown it ultimately paid to borrow money it would have had absent Zimmer's infringement.[6] (See Lawton Decl., doc. # 400-1, at ¶¶ 9, 12.) Zimmer argues that there is no evidence Stryker would have borrowed money even had Zimmer not infringed, but that argument is entirely speculative. The fact that Stryker chose not to use the cash it had available during the damages period to avoid borrowing does not mean it would have borrowed had it had the additional $70 million in lost profits on hand. On top of that, Stryker's proposed rate is considerably below the prime rate, which courts routinely use when calculating prejudgment interest. See, e.g., *Trading Techs., Int'l v. eSpeed, Inc.*, No. 04-C-5312, 2008 U.S. Dist. LEXIS 8764, 2008 WL 345604, at *11 (N.D. Ill. Feb. 5, 2008) ("In determining the rate of prejudgment interest awards in patent infringement cases, courts in this circuit

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6. Zimmer argues that Stryker has not adequately shown that it borrowed money at the rate it claims. In this respect, however, the report of Stryker's damages expert suffices to establish that Stryker's weighted-average interest rate was 3.83%.

have routinely used the prime rate."). Thus, prejudgment interest will be calculated at a rate of 3.83%.

The other remaining question is whether interest will be compounded monthly, as Stryker requests, or quarterly, as Zimmer suggests. Resolution of this question, also, is left largely to the Court's discretion. See *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 969 (Fed. Cir. 1986) ("The rate of prejudgment interest and whether it should be compounded or uncompounded are matters left largely to the discretion of the district court."). Zimmer's argument that interest should be compounded quarterly is based on the fact that Davol pays Stryker a royalty for use of a Stryker patent on a quarterly basis. But the damages in this case are for lost profits from infringing sales, not loss of a reasonable royalty, and Stryker accumulates sales revenue for its patented devices on a daily, not quarterly, basis. From that vantage point, then, Stryker's proposal that interest be compounded monthly is conservative. The Court agrees with Stryker, then, that compounding interest on a monthly basis is appropriate in this case. As such, Stryker is entitled to an award of $11,167,670.50 in prejudgment interest on the jury award and supplemental lost profit damages Stryker incurred from December 1, 2012 to February 28, 2013. In addition, for the same reasons the Court found this to be an "exceptional case," the Court awards Stryker additional prejudgment interest, calculated at a rate of 3.83% and compounded monthly, on its reasonable attorney's fees. See *Mathis v. Spears*, 857 F.2d 749, 761 (Fed. Cir. 1988) ("[A] district court does have authority, in cases of bad faith or other exceptional circumstances,

to award prejudgment interest on the unliquidated sum of an award made under Section 285.").

E. Motion for Enhanced Damages (doc. # 405)

Stryker's final motion is for enhanced damages under 35 U.S.C. § 284, based on Zimmer's willful infringement. Under § 284, "the court may increase the damages up to three times the amount found or assessed" at trial. 35 U.S.C. § 284; *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 670 F.3d 1171, 1191 (Fed. Cir. 2012). Whether and to what extent enhanced damages should be awarded "remains firmly within the scope of the district court's reasoned discretion, informed by the totality of circumstances." *Bard Peripheral*, 670 F.3d at 1191. "The paramount determination in deciding to grant enhancement and the amount thereof is the egregiousness of the defendant's conduct based on all the facts and circumstances." *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992). In evaluating the egregiousness of the defendant's conduct, courts typically rely on the nine *Read* factors, which are:

(1) whether the infringer deliberately copied the patentee's ideas or design;

(2) whether the infringer investigated the scope of the patent and formed a good faith belief that it was invalid or not infringed;

(3) the infringer's conduct during litigation;

(4) the infringer's size and financial condition;

(5) closeness of the case;

(6) duration of the infringing conduct;

(7) remedial actions, if any, taken by the infringer;

(8) the infringer's motivation for harm; [and]

(9) whether the infringer attempted to conceal its misconduct.

Id. at 826-27.

In this case, all nine *Read* factors favor substantial enhancement of the jury's award. As to the first factor, multiple trial witnesses testified that Zimmer deliberately copied Stryker's patented inventions. (See, e.g., Trial. Tr., doc. # 358, at 105 (testimony of Zimmer engineer and Rule 30(b)(6) witness that Zimmer copied Stryker); Olson Dep. Tr., doc. # 406-1, at 8 (testimony of Pulsavac Plus design engineer noting that use of gear drives, like the ones ultimately incorporated in the Pulsavac Plus devices, "would be probably copying").) On the second factor, Zimmer presented no evidence that it investigated the scope of Stryker's patents to form a good faith belief about invalidity or infringement, militating in favor of enhancement. The third factor also favors enhancement, to the extent Zimmer needlessly delayed in producing requested information concerning its application for a patent for the Pulsavac Plus. (See Stryker's Br. in

Support of Mot. for Enhanced Damages, doc. # 406, at 11-14 (detailing Zimmer's persistent refusal to turn over requested information).) With respect to the fourth factor, Zimmer is a multi-billion dollar company with reported annual profits in excess of three-quarters-of-a-billion dollars. (See Ex. N, doc. # 408-4.) A $70 million verdict sounds large in the abstract, but in context, it may not be enough, without enhancement, to deter infringing conduct. As to the fifth factor, as the Court noted earlier and as reflected in the jury's verdict, this was not a close case. Every major decision—from claim construction through post-verdict motions—went against Zimmer. (See, e.g., Verdict, doc. # 381 (finding for Stryker on every issue).) On the sixth factor, Zimmer's infringement spans more than a decade, from 2000 all the way through the present—a considerable amount of time. And, with respect to the seventh factor, at no point during its 12-plus years of infringement did Zimmer take any remedial action to stop infringement or mitigate damages, including during the two-plus years covered by this litigation. In fact, to this very day, Zimmer continues to manufacture and sell the infringing products. The eighth factor counsels in favor of enhancement principally because Zimmer and Stryker are the only major competitors in the orthopedic pulsed lavage device market, so that Zimmer's infringement of Stryker's patents can only have been motivated by a desire to harm Stryker by depriving it of market share. See, e.g., *Parker Hannifin Corp. v. Wix Filtration Corp.*, No. 1:07-CV-1374, 2011 U.S. Dist. LEXIS 33578, 2011 WL 976559, at *17 (N.D. Ohio Mar. 17, 2011) (motivation to take business from "fierce competitor" weighed in favor of enhanced damages). Finally, on the ninth factor, although Zimmer

did not attempt to hide the entirety of its misconduct, it did attempt to prevent Stryker from discovering certain aspects of its infringement in the run up to trial. See Stryker's Br. in Support of Mot. for Enhanced Damages, doc. # 406, at 11-14 (detailing Zimmer's persistent refusal to turn over certain requested information before trial).)

Because the *Read* factors so overwhelmingly favor enhancement, the real question here is not whether enhancement is warranted, but how much enhancement is appropriate. Given the one-sidedness of the case and the flagrancy and scope of Zimmer's infringement, the Court concludes that treble damages are appropriate here. See, e.g., *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1226 (Fed. Cir. 2006) (affirming treble damages award); *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1371 (Fed. Cir. 2004) (affirming double damages award after finding only four *Read* factors).

The last question in this case is whether Stryker is also entitled to treble damages on the Court's award of supplemental damages. The Court answers that question in the affirmative. Zimmer acknowledges that enhancement of post-verdict supplemental damages may be warranted based on "the egregiousness of the defendant's conduct based on all the facts and circumstances." *Spectralytics, Inc. v. Cordis Corp.*, 649 F.3d 1336, 1349 (Fed. Cir. 2011). In this case, the same factors that warrant treble damages on the jury's lost profits award counsel in favor of awarding treble damages on the Court's award of supplemental damages. Indeed, the case for treble damages on the

supplemental damages award is even stronger than it is for the jury's lost profits damages award, since, during the time period addressed by the supplemental damages award, Zimmer had already been found to infringe two of the three patents-in-suit, and should have been aware of the strong likelihood of an unfavorable verdict. See *Synqor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1385 (Fed. Cir. 2013) (affirming treble damages for court's award of supplemental damages, "based on the 'egregiousness' of Defendants' conduct in continuing to sell the accused products after the jury found infringement."). At bottom, there is simply no good reason *not* to treble the award of supplemental damages here when the Court has determined that treble damages are appropriate for pre-November-30th lost profits.

THEREFORE IT IS ORDERED THAT Zimmer's Motions for Judgment as a Matter of Law and/or for a New Trial (doc. ## 369, 401, 425, 430, 435, 438, 442, 447, 453) are **DENIED**.

IT IS FURTHER ORDERED THAT Zimmer's Motion for Judgment Barring Pre-Suit Damages Pursuant to the Defense of Laches (doc. # 418) is **DENIED**.

IT IS FURTHER ORDERED THAT Stryker's Motion to Strike Zimmer's Supplemental Brief to Disclose the Release of the Redesigned Pulsavac Plus (doc. # 534) is **GRANTED**.

IT IS FURTHER ORDERED THAT Stryker's Motion for a Permanent Injunction (doc. # 396) is

GRANTED. Upon entry of final judgment, Zimmer will be permanently enjoined from manufacturing, marketing, or selling any products found to have infringed the 807 patent, including the infringing Pulsavac Plus products.

IT IS FURTHER ORDERED THAT Stryker's Motion for Supplemental Damages (doc. # 414) is **GRANTED**. Supplemental lost profit damages in the amount of $2,351,257.66 shall be included in the Final Judgment.

IT IS FURTHER ORDERED THAT Stryker's Motion for a Finding of Exceptional Case and for an Award of Attorneys' Fees (doc. # 410) is **GRANTED**. Zimmer shall pay Stryker its reasonable attorneys' fees.

IT IS FURTHER ORDERED THAT Stryker's Motion for Prejudgment Interest (doc. # 399) is **GRANTED**. Prejudgment interest of $11,167,670.50 on the jury award and supplemental lost profit damages Stryker incurred from December 1, 2012 to February 28, 2013 shall be included in the Final Judgment. In addition, Zimmer shall pay Stryker prejudgment interest, calculated at a rate of 3.83% and compounded monthly, on Stryker's reasonable attorneys' fees.

IT IS FURTHER ORDERED THAT Stryker's Motion for Enhanced Damages (doc. # 405) is **GRANTED**. The Court awards Stryker treble damages on the jury's $70 million verdict and on the Court's $2,351,257.66 supplemental damages award.

Final Judgment incorporating these rulings shall be entered.

IT IS SO ORDERED.

DATED: August 7, 2013

/s/ Robert J. Jonker
ROBERT J. JONKER
UNITED STATES DISTRICT JUDGE

APPENDIX E — ORDER OF THE UNITED STATES DISTRICT COURT, WESTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION, FILED NOVEMBER 29, 2012

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

CASE NO. 1:10-CV-1223

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., AND STRYKER SALES CORPORATION,

Plaintiffs and Counter-Defendants,

v.

ZIMMER INC., AND ZIMMER SURGICAL, INC.,

Defendants and Counter-Plaintiffs.

November 29, 2012, Decided
November 29, 2012, Filed

HON. ROBERT J. JONKER

ORDER REGARDING STRYKER'S MOTION FOR PARTIAL SUMMARY JUDGMENT OF INFRINGEMENT

Plaintiff Stryker sued Defendant Zimmer for infringing multiple claims in three of its patents: U.S.

Appendix E

Patent Nos. 6,022,329 ("the 329 patent"), 6,179,807 ("the 807 patent"), and 7,144,383 ("the 383 patent"). (Am. Compl., doc. # 14.) In the Motion now before the Court (doc. # 156), Stryker asserts that it is entitled to summary judgment on 21 of its 23 infringement claims. The only claims on which Stryker is not seeking summary judgment are Claim 10 (independent) and Claim 14 (dependent) of the 383 patent. The Court now grants in part and denies in part Stryker's Motion.

I. BACKGROUND

Stryker and Zimmer manufacture pulsed lavage irrigation systems. A pulsed lavage irrigation system operates like a motorized squirt gun combined with a small suction tube. Medical professionals use pulsed lavage irrigation systems to clean wounds during surgery by spraying water onto the wound site and vacuuming excess or dirty liquid out of the wound.

Stryker owns a number of patents for its pulsed lavage irrigation systems. Three of those patents are at issue in this litigation. The 329 patent covers a pulsed irrigation handpiece with an elongate trigger, an electric motor in the handpiece, and an irrigation tube adjacent to the motor. (*See* Ex. D, doc. # 158-4, at 2.) The 383 patent describes a similar device with, among other things, a variable speed motor and a related assemblies. (*See* Ex. F, Doc. # 159-1.) The 807 patent describes a pulsed irrigation handpiece with a lock assembly at the front end that snaps shut to fasten a tip assembly to the handpiece. (*See* Ex. E, Doc. # 159-5.)

Appendix E

Stryker claims that Zimmer's Pulsavac Plus line of pulsed lavage irrigation systems infringes these patents. The Pulsavac Plus devices are pistol-shaped, pulsed irrigation handpieces. They present as largely indistinguishable from Stryker's pulsed lavage irrigation systems, except for a few small--but, Zimmer claims, important--differences. The question presented in this Motion is whether the differences create genuine issues of material fact for the jury as to whether Zimmer's Pulsavac Plus devices ("Pulsavac Plus" or "accused devices") infringe the patent claims at issue in the Motion. With one exception, the Court concludes that the differences do not create material issues of fact.

II. LEGAL STANDARD

Stryker moves for summary judgment that Zimmer infringed multiple claims in the 329, 383, and 807 patents. The Court, in its *Markman* Opinion and Order, has already construed the key claim terms (*See* Op. & Order, doc. # 106.) The remaining issue is "whether all of the claim limitations are present, either literally or by a substantial equivalent." *Innovention Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1318 (Fed. Cir. 2011). Summary judgment is proper on this question "when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device." *Id.*

Appendix E

III. ANALYSIS

Stryker claims that Zimmer's Pulsavac Plus devices infringe on three separate patents: the 329 patent, the 383 patent, and the 807 patent. The Court begins its analysis with Stryker's claim under the 329 patent.

A. The 329 Patent

Stryker asserts that the Pulsavac Plus devices infringe Claim 2 of the 329 patent, which discloses a "pulsed irrigation surgical handpiece" having several limitations. (Ex. D, doc. # 158-4, at 2.) Zimmer disputes that the Pulsavac Plus meets three of the limitations in Claim 2: (1) an elongate trigger; (2) an electric motor in the handle; and (3) an irrigation tube in the handle adjacent to the electric motor. (Def.'s Opp., doc. # 225, at 4-11.)

With respect to the elongate trigger, Zimmer argues that the trigger on Pulsavac Plus devices is not elongate, but rather a single rocker switch consisting of two regular-sized components. The Court did not define "elongate" at claim construction because neither party sought construction of the term. By any reasonable construction of the term, however, the trigger on Zimmer's devices is elongate. The Pulsavac Plus triggers are longer than they are wide, which satisfies the normal meaning of elongate and the one now urged by Stryker. Zimmer protests that an elongate trigger must mean one that is longer than an ordinary trigger. Even assuming it is possible to give some objective and meaningful content to the term "ordinary trigger," Zimmer's argument would still fail because,

by its own design, Zimmer included a single trigger mechanism with two parts, each of which is the length of an "ordinary trigger." Considering the rocker switch trigger mechanism as a whole, it is necessarily twice the length of even Zimmer's hypothetical ordinary trigger. No reasonable jury could fail to find that the Pulsavac Plus devices meet the "elongate trigger" limitation of Claim 2 of 329 patent.

Whether the accused products have an irrigation tube "adjacent to" the motor is also a question beyond genuine factual dispute. The Court construed "adjacent" to mean "close to or lying near." (Op. & Order, doc. # 106, at 9, 11).) The irrigation tube in the Pulsavac Plus is, at most, two centimeters away from the motor. (*See* Def.'s Opp., doc. # 225, at 11.) No reasonable factfinder could say, on these facts, that a gap of two centimeters is so substantial that the tube is not "close to or lying near" the motor, especially given that the Pulsavac Plus (including tip assembly) is roughly a foot long. Zimmer effectively proposes two alternative definitions for "adjacent." (*See id.* at 10 (arguing that the motor and irrigation tube in the Pulsavac Plus are not adjacent "because (1) there is an object of like kind (drain tube) spaced between the irrigation tube and the motor; and (2) because the irrigation tube is further away from the motor than it is close to it (when measuring the total space that is available in the product for the irrigation tube").) Zimmer's proposals are untimely efforts to re-visit claim construction issues. *See Central Admixture Pharmacy Services, Inc. v. Advanced Cardiac Solutions, P.C.*, 482 F.3d 1347, 1356 (Fed. Cir. 2007) ("The district court found that ACS waived any argument with

respect to this term by failing to raise it during the claim construction phase. We agree."). Consistent with the Court's earlier construction of the term "adjacent," Stryker is entitled to summary judgment on this issue.

Zimmer's final argument on Claim 2 of the 329 patent does identify a genuine factual issue for trial. Zimmer contends that the motor in its Pulsavac Plus device is not in the handle of the unit as required by Claim 2. (Ex. D, doc. # 158-4, at 2.) At claim construction, the Court defined "handle" to mean "a portion of a device that is designed to be held by a hand or hands." (Order, doc. # 106, at 8-9.) The motor in the Pulsavac Plus is located in a nub, in roughly the same location as the hammer in a standard pistol. (*See* Ex. D, doc. # 158-4, at 2.) Whether this portion of the product was "designed to be held" is a question of fact on which reasonable jurors could disagree. Zimmer has produced evidence that would allow the jury to decide in its favor on this issue. The designed grips on the Pulsavac Plus, for example, do not extend to the nub that houses the motor, from which it may be inferred that the nub was not designed to be held. Zimmer has design witnesses that will testify in support of that inference. (*See* Def.'s Opp., doc. # 225, at 6.) As further support of its position, Zimmer can point to statements Stryker made in an effort to distinguish its own products from the prior art of the Mattchen patent. (*See id.* at 4-5.) On the other hand, there is also strong evidence that Stryker has presented to support a jury's conclusion that the nub area really does meet the "designed to be held" claim limitation. One of the Pulsavac Plus' lead designers is on record as demonstrating ways to hold the Pulsavac Plus

so that the user's hand grips the nub on the device. (*See, e.g.*, Ex. S, doc. # 164, at 5 ("I mean, you can technically say [the nub's] a handle. You might be able to palm it.").) Furthermore, Zimmer's patent application for the Pulsavac Plus says that the "barrel *grip* encloses a motor and pump assembly," suggesting that the motor is part of the grip or, in other words, part of the handle. (*See* Ex. O, doc. # 160-5.) Accordingly, the Court cannot grant summary judgment on this aspect of Stryker's Motion under Claim 2 of the 329 patent.

B. The 383 Patent

Stryker asserts that the Pulsavac Plus devices infringe as a matter of law on 17 separate claims under the 383 patent. Stryker's claims chart clearly and succinctly sets out the ways in which the Pulsavac Plus devices conform to each of the limitations of the asserted claims under the 383 patent. (*See* Ex. F, doc. # 159-1.) The Court agrees with Stryker's characterizations of various components of the Pulsavac Plus, and with its conclusions that those components overlap with the limitations set out in the asserted claims of the 383 patent. The Court notes that Zimmer spent none of its time at oral argument contesting Stryker's position on these claims.

Zimmer's written arguments opposing summary judgment on the asserted claims are unavailing. Zimmer argues that there is a genuine question of material fact as to what constitutes the "front end" of the Pulsavac Plus. (*See* Def.'s Opp., doc. # 225, at 19-20.) Neither party sought construction of this term, probably because

its meaning is self-evident. In any event, no reasonable factfinder could fail to conclude that the suction tube in Zimmer's Pulsavac Plus has an open end adjacent to the "fron nd"--however reasonably defined--and that the suction tube runs away from it. To find otherwise would require an impossibly cramped meaning of the term. Indeed, Zimmer impliedly adopts just such a definition by insisting that "front end" must mean something like "the end" or the lead surface of the device--effectively a single geometric plane, rather than a three dimensional region. Such an artificially limited construction has no basis in the specification, in any other intrinsic or extrinsic evidence, or in common usage and understanding. Indeed, accepting Zimmer's implicit construction of "front end" would effectively eliminate any meaningful distinction between "front end" and "front face," even though the claims do not use the terms interchangeably. Moreover, even the arguably more limited term "front face" does not in common understanding (or in any extrinsic or intrinsic evidence of record) imply a single, two-dimensional plane. A "face" may well suggest a surface, but surfaces can and do have ridges, elevations, depressions and protrusions, just like human faces, for example. (*Id.* at 13.)

In a similar vein, Zimmer argues that the plastic flange with the male nozzles is not part of the housing, but a separate molded piece, so that the water and suction tubes do not extend from the front face of the housing, but from the flange. Zimmer's argument, essentially, is that, by using a flange with nozzles to connect the irrigation and suction tubes to the tip assembly, it has side-stepped the limitations in claims 10 and 38 of the 383 patent. But

whether through a separately molded flange or otherwise, the suction tube on the accused products still has an open end adjacent to and running away from the front end. The fact that the front end of the Pulsavac Plus consists, in part, of a plastic flange does not change that. Indeed, to allow Zimmer to avoid liability for infringement based on such a minor, insignificant change would undermine fundamental protections afforded by patent law. *See Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608, 70 S. Ct. 854, 94 L. Ed. 1097, 1950 Dec. Comm'r Pat. 597 (1950) (making of insignificant changes to a patented device does not protect an alleged infringer from liability for damages for infringement).

Finally, Zimmer argues that the Pulsavac Plus does not include "a control assembly disposed in [the] housing," since the control assembly for the Pulsavac Plus is only "partially disposed in" the housing. (Def.'s Opp., doc. # 225, at 21-22.) Zimmer's argument rests on the assumption that "disposed" means "entirely disposed," so that if any part of a control assembly lies outside of the housing, it is not "disposed in the housing." But nothing in any of the claims of the 383 patent requires--either expressly or by implication--such a narrow, constraining definition of "disposed." There is, moreover, no evidence that such a reading is necessary or even logical in this case. Zimmer has not shown, for example, how it is of any practical significance that a fraction of the control assembly rests outside of the housing. Rather, Zimmer seems to be reading an artificial limitation into "disposed" to escape liability for infringement. No reasonable jury can read a similar limitation into the Claim 10 or any of its dependent claims.

In sum, the Court accepts Stryker's arguments regarding the claims at issue in the 383 patent because the Pulsavac Plus embodies each and every limitation disclosed in the asserted claims. Zimmer's arguments to the contrary hinge on such cramped and unreasonable interpretations or applications of the language in the 383 patent that no reasonable factfinder could find for Zimmer on any of them. Accordingly, the Court grants Stryker's Motion with respect to all asserted claims under the 383 patent.

C. The 807 Patent

Stryker asserts that the Pulsavac Plus devices infringe independent claim 45 of the 807 patent, and dependent claims 50-52 of the same. Zimmer disputes only that the Pulsavac Plus meets three limitations in claim 45: (1) a front end for receiving the discharge tube and the suction tube; (2) a lock assembly mounted to the front end of the body of the handpiece for releasably securing the discharge tube and the suction tube to the body of the handpiece; and (3) a discharge head disposed in the body of the handpiece, having an open end adjacent to the front end of the body of the handpiece for receiving the discharge tube. (Def.'s Opp., doc. # 225, at 12-17.)

Zimmer's arguments about the definition of "front end" are as unavailing in the context of the 807 patent as they were in the context of the 383 patent. Properly construed, the term "front end" in the 807 patent includes to the area at or near the device's leading edge. All of Zimmer's arguments that turn on the word "front" fail

under that commonsense definition. (*See, e.g.*, Def.'s Opp., doc. # 225, at 14-16.)

Zimmer claims that the Pulsavac Plus does not contain a "lock assembly" as the Court defined that term at claim construction ("components that work together to secure or fasten the tip to the handpiece"). Zimmer's argument, essentially, is that the blue ring that locks the tip assembly to the handpiece of the Pulsavac Plus is only one component, and that the Court's definition requires a second. That argument ignores the grooves in the handpiece of the Pulsavac Plus, without which the blue ring would be totally ineffective. A component is reasonably defined as a constituent part or feature, and the grooves carved into the body of the Pulsavac Plus meet that definition. Nothing in the Court's construction of "lock assembly" required that the components be separate from the handpiece, as Zimmer seems to suggest. Thus, a reasonable factfinder could not conclude that the Pulsavac Plus lacks a lock assembly.

Zimmer argues that the Pulsavac Plus does not contain a discharge head to "receive" the discharge tube from tip because the Pulsavac Plus handpiece has male, not female, connectors. Zimmer suggests this means that the Pulsavac Plus' handpiece does not "receive" the tip assembly, but is inserted into the tip assembly. On its face, Zimmer's reading of "receive" is artificially narrow. Nothing about the word "receives" requires a certain type of connector. The word "receives" in this context can only mean that one part of the device connects directly with another part of the device. There is no genuine issue of

fact about whether the front end of the Pulsavac Plus handpiece "receives" the tip assembly in this sense. It plainly does.

Finally, Zimmer claims that the Pulsavac Plus devices do not contain "a single piece drain tube . . . having a front end . . . adjacent the front end of [the handpiece's] body." To make that argument, Zimmer relies on readings of "adjacent" and "front end" rejected by the Court elsewhere in this Order. Those readings are no more appropriate in this context than they were in the earlier contexts in which the Court rejected them.

ACCORDINGLY, IT IS ORDERED that Stryker's Motion for Partial Summary Judgment of Infringement is **GRANTED** with respect to the 383 and 807 patents.

IT IS FURTHER ORDERED that Stryker's Motion for Partial Summary Judgment of Infringement of the 329 patent is **DENIED** on the issue of whether the Pulsavac Plus devices include a motor in the handle of the device, but **GRANTED** in all other respects.

Dated: November 29, 2012

/s/ Robert J. Jonker
ROBERT J. JONKER
UNITED STATES
DISTRICT JUDGE

APPENDIX F — MEMORANDUM OPINION AND ORDER OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION, FILED FEBRUARY 1, 2012

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

STRYKER CORP., *et al.*,

Plaintiffs/Counter-Defendants,

v.

ZIMMER, INC., *et al.*,

Defendants/Counter-Plaintiffs.

CASE NO. 1:10-cv-1223

HON. ROBERT J. JONKER

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

INTRODUCTION

This is a patent infringement case. Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation (collectively, "Stryker") allege that Zimmer Inc. and Zimmer Orthopaedic Surgical Products (collectively, "Zimmer") are infringing one or more of three Stryker patents, including U.S. Patent Nos.

6,022,329 (the "'329 patent"), 6,179,807 (the "'807 patent"), and 7,144,383 (the "'383 patent"). (Compl., docket #1, ¶¶ 11-13.) Both companies work in the medical technology field, developing and marketing products relating to various medical specialities. (*Id.* ¶¶ 6-10.) The patents at issue in this case pertain to pulsed lavage irrigation systems, which are commonly used in orthopedic surgeries and wound management to remove blood and other debris from surgical sites. (Stryker's Br., docket # 66, at 5.)

At the Court's invitation, the parties have identified terms for which they believe construction is most important to advance the case, and they have proposed competing constructions of most of these terms. (Jt. State., docket # 61.) The Court heard oral argument on the parties' proposed constructions on January 18, 2012. This Claim Construction Memorandum contains the Court's construction of these disputed terms.

CLAIM CONSTRUCTION PRINCIPLES

When the meaning of a claim's language is disputed, the court must construe the claim as a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd* 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996). Proper claim construction begins with the language of the claims themselves. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). "'In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to particularly point[] out and distinctly claim[] the subject matter which the patentee

regards as his invention. 35 U.S.C. § 112, ¶ 2.'" *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003) (quoting *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (internal quotations omitted)). The Court must give claim terms the ordinary and customary meaning ascribed to them by "a person of ordinary skill in the art in question at the time of the invention, i.e, as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

When interpreting a claim as understood by a person of ordinary skill in the art, the court first examines the intrinsic evidence before it, which includes not only the claim language, but also the written description and the prosecution history of the patent. *Phillips*, 415 F.3d at 1319. Terms that have a plain and ordinary meaning typically do not need to be construed, as their meaning is clear from the term itself. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010). A court considers the written description "because it is relevant not only to aid in the claim construction analysis, but also to determine if the presumption of ordinary and customary meaning is rebutted." *Brookhill-Wilk 1, LLC*, 334 F.3d at 1298. In fact, the specification is usually "the single best guide to the meaning of a disputed term." *Vitronics*, 90 F.3d at 1582. The prosecution history may also be considered to "inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Phillips*, 415 F.3d at 1317.

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A court may also consider extrinsic evidence, such as dictionaries, treatises, and expert or inventor testimony, in construing patent claims. *See id.* Technical dictionaries may help a court understand "the meaning of particular terminology to those of skill in the art of the invention." *Id.* at 1318. Likewise, expert testimony may be useful for explaining the technology at issue and how the particular invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of ordinary skill in the art, or to establish that a particular claim in the patent or in prior art has a particular meaning in the pertinent field. *See id.*

While a court may consider both intrinsic and extrinsic evidence, intrinsic evidence is generally more reliable and thus generally entitled to greater weight when construing a claim term. *See id.* at 1320-21. What ultimately controls, however, is the language of the claims themselves: "[T]he court's focus [must] remain[] on understanding how a person of ordinary skill in the art would understand the claim terms." *Id.* at 1323. Thus, "'[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.'" *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1995)).

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CLAIM ANALYSIS

1. *'329 Patent, Claim 2: "trigger"*

The parties propose the following constructions of the term "trigger" as it appears in claim 2 of the '329 patent:

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'329, col.22, l.3: an elongate trigger movably mounted on said housing;	A lever pulled by a finger or fingers to activate a device or mechanism (Jt. State., docket # 61.)	Resilient lever designed to be pulled in a single direction (Jt. State., docket # 61.)

The parties agree that a trigger in claim 2 is a lever pulled by a user. (Zimmer's Br., docket # 76, at 9.) The parties also agree that the purpose of the trigger is "to activate a device or mechanism," although Zimmer argues that the inclusion of this stated purpose "is an unnecessary addition to the definition." (*Id.* at 9 n.4.(citing *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (holding that claim language stating a "purpose or intended use," often found in the preamble, is typically not limiting))). The issue is whether the trigger in claim 2 must "inherently return[] to its initial, resting position once the pulling force has been removed." (*Id.*)

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Zimmer argues that "unidirectional pulling and resiliency are characteristics inherent to a trigger." (*Id.* at 10.) Zimmer's bases this argument largely on the '329 patent specification, which describes a "trigger lever 242 . . . bendable . . . in a resilient manner," and that "[u]pon release of the trigger by the user, the natural resilience of the trigger lever 242 unbends it back to its . . . forward position . . . without need for a separate return spring." ('329 patent, docket # 77-1, at 13:39-56.) Stryker counters that a person of ordinary skill in the art would understand the "trigger" to describe any lever that could be pulled to operate a device or mechanism without necessarily returning to its resting position after being pulled by a user, and that Zimmer's construction is improperly limited to "the precise embodiment described in the specification." (docket #66, at 12.)

The starting point is the language of claim 2 itself. *See Phillips*, 415 F 3d at 1317. Nothing in the language of claim 2 requires the trigger to be resilient. (docket # 77-1, at 22:3.) The only word directly modifying "trigger" is "elongate," which in no way requires or implies resilience. To the extent the specification describes resilience as one feature of the trigger on the preferred embodiment, the absence of any resilience requirement in the claim itself suggests that Stryker in no way meant to limit the trigger in claim 2 to resilient, elongate triggers, as opposed to all elongate triggers. The Federal Circuit has made clear that "one of the cardinal sins of patent law . . . [is] reading a limitation from the written description into the claims." *Phillips*, 415 F.3d at 1319-20; *see also Agfa Corp. v. Creo Prods. Inc.*, 451 F.3d 1366, 1376 (Fed. Cir. 2006) ("As noted, this court has repeatedly rejected the contention that

depiction of a single embodiment in a patent necessarily limits the claims to that depicted scope."). While the trigger lever 242 described in the specification is made of a resilient plastic material that allows it to return to its original resting position after being released by a user, it is the function of the trigger—to engage the motor and allow for "power pulsing" of the wound site—that defines it and sets it apart from other types of levers (resilient or otherwise). Contrary to Zimmer's position, the inclusion of the trigger's function is a necessary and appropriate component of its definition, and the addition of the word "resilient" is not.

The extrinsic evidence also supports Stryker's proposed construction. For example, the dictionary definition discussed in both parties' briefs defines "trigger" as "1. The lever pressed by the finger to discharge a firearm. 2. Any similar device used to release or activate a mechanism." AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIC DICTIONARY 1758 (1987). Although the firearm provides a helpful illustration of a trigger, the definition of trigger is obviously not limited to firearm applications. Rather, the term is used to describe any similar lever that releases or activates a mechanism. *See also* CHAMBERS CONCISE DICTIONARY 1141 (1991) (defining "trigger" as "a lever that releases a catch so as to fire a gun or set a mechanism going; anything that starts a train of actions"); WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 1261 (1991) (defining a "trigger" as a "movable part by which a mechanism is actuated"). The prior art is full of examples of the term "trigger" being used in a variety of applications that do not necessarily incorporate inherent resilience into the definition. (docket

87-91, Exs. O-AA.)[1] Therefore, the Court is persuaded that a person of ordinary skill in the art would construe "trigger" consistent with Stryker's proposed definition, and not the narrower definition Zimmer advocates. The Court therefore adopts Stryker's proposed construction of the term.

2. '329 Patent, Claim 2: "handle"

The parties propose the following constructions of the term "handle" as it appears in claim 2 of the '329 patent:

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'329, col.22, l.2: a hollow housing comprising a handle;	A portion of a device designed to be held by a hand or hands. (Jt. State., docket # 61.)	Plain and ordinary meaning; no construction necessary (Jt. State., docket # 61.)

The first question is whether to construe the term at all. Zimmer argues that no construction is required because the term "has a well-understood meaning that is clear to persons of ordinary skill in the art," and that "fact and expert witnesses are capable of proffering testimony

1. Indeed, as Stryker notes in its Reply Brief, Zimmer's own engineering and marketing materials relating to the allegedly infringing device appear to treat its device's rocker switch as a type of trigger even though it is not resilient. (docket # 86, at 6.) This is obviously not dispositive, though it provides further confirmation of the Court's construction in this case.

regarding whether an accused product satisfies the term handle, so the jury can decide the fact inquiry." (docket # 76, at 11.) Consequently, Zimmer does not propose a claim construction. Stryker argues a construction is necessary, given the parties' inability to agree on the term's meaning in this case. (docket # 66, at 13.)

"When the parties raise an actual dispute regarding the proper scope of . . . [a] claim[], the court, not the jury, must resolve the dispute." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008). "In some cases, the ordinary meaning of claim language . . . may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* (citing *Phillips*, 415 F.3d at 1312-13). It is true in this case that Stryker to some extent relies on plain and ordinary meaning even though it advocates construction of the term. But construction is still appropriate because Zimmer argues the plain and ordinary meaning of the term necessarily excludes something Stryker claims for it. Because the parties disagree, claim construction is required.

At issue is claim 2 of the '329 patent, which provides that the claimed "pulsed irrigation surgical handpiece" includes "a hollow housing comprising a handle; . . . an irrigation liquid tube extending along said handle; [and] an electric motor spaced between the top and bottom of said handle and located in said handle . . . ." (docket # 77-1, at 22:1-8.) Stryker argues the claim language and specification "supports a broad construction of 'handle' according to its plain and ordinary meaning." (docket # 66,

at 13.) Specifically, Stryker constructs "handle" to mean "a portion of a device designed to be held by a hand or hands." (*Id.*) Zimmer objects to Stryker's construction because it would impermissibly construe "handle" to "read not only on the handle but also on what one of ordinary skill in the art would understand to be the barrel of a pistol-shaped device." (docket # 76, at 12.)

The Court adopts Stryker's proposed claim construction. According to the specification, "[t]o use the apparatus for irrigation of a surgical site, the user grips the handpiece, either by the handle 12, in a pistol-like manner, or where the barrel 13 joins the handle 12, in a wand like manner." (docket # 77-1, at 20:48-51.) A person of ordinary skill in the art would interpret the specification consistent with Stryker's position—that the irrigation device's handle is the portion of the device designed to be held by a hand. The '329 claim language also supports this interpretation, as claim 2 does not necessarily require the inclusion of a barrel, which is a feature of the preferred embodiment that appears to be captured in dependent claim 4. (*Id.* at 22:1-42.) Moreover, despite Zimmer's concerns, Stryker's construction would not necessarily include the definition "barrel 13" within the definition of "handle 12." Rather, it would depend on whether the barrel 13 of an allegedly infringing product was "designed to be held by a hand"—a question that the Court leaves for subsequent motion practice and, as necessary, trial.[2] Finally, the Stryker construction is also

2. The Court does not rely on Stryker's argument based on Figure 4 of the '329 patent. (docket # 66, at 13.) In Figure 4, the term "housing handle" is identified with specification reference numerals 11, 12, and 15, which Stryker argues is persuasive

consistent with the extrinsic evidence. *See, e.g.*, WEBSTER'S UNABRIDGED DICTIONARY 642 (1989) (defining "handle" to mean "a part of a thing made specifically to be grasped or held by the hand"); WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 550 (1991) (defining "handle" to mean "a part that is designed especially to be grasped by the hand.")

3. '329 patent, Claim 2: "adjacent"

The parties propose the following constructions of the term "adjacent" as it appears in claim 2 of the '329 patent:

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'329, col.22, l.5-7: an electric motor spaced between the top and bottom of said handle and located in said handle adjacent said irrigation tube;	Close to or lying near (Jt. State., docket # 61.)	Plain and ordinary meaning; no construction necessary (Jt. State., docket # 61.)

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intrinsic evidence in support of its position. (*Id.*) The use of "handle" in these discrete instances appears to be a typographical error. Indeed, other than the instances cited in Stryker's brief, reference numeral 11 is consistently defined as the "housing" throughout the '329 specification, and numerals 12 and 15 are used to describe the left- and right-hand sides of the housing, and not component parts of the "handle." (*See, e.g.*, docket # 67-2, '329 patent, at 3:28-39.)

Once again, the parties dispute whether this term requires construction. Zimmer argues that construction is not necessary because Stryker's definition simply "replaces one commonly word with several." (docket # 76, at 17.) Stryker counters that its proposed definition is consistent with the term's plain meaning and the evidence of record, and that because Zimmer refuses to adopt the construction, a dispute exists as to the term's definition, which creates a question that the Court must address as a matter of law. (docket # 66, at 15-16.) Because a claim construction dispute exists, and for the reasons discussed above in the context of the Court's "handle" analysis, the Court engages in a claim construction analysis of "adjacent." *See O2 Micro Int'l Ltd.*, 521 F.3d at 1360.

Here, Stryker's proposed construction of "adjacent" as "close to or lying near" is consistent with the claim language and the specification. The preferred embodiment in the specification describes a "DC energizable electric motor 36" that "is snugly housed in the space between the left and right . . . shell parts 30 and 31" that surround the motor 36, and a liquid hose 160 that is located between the shell parts 30 and 31 and the housing 11. (docket # 77-2, at fig. 4, 4:1-8, 9:40-58.) The claim language describes an electric motor that is located within the handpiece's handle "adjacent said irrigation tube." (*Id.* at 22:5-7.) Nothing in the intrinsic—or extrinsic evidence for that matter—reveals any reason to deviate from the meaning of the word routinely used in other constructions. Courts routinely construct terms such as "adjacent," often providing definitions similar to what has been advocated here. *See, e.g., Free Motion Fitness, Inc. v. Cybex Int'l, Inc.*, 423 F.3d 1343, 1348-49 (Fed. Cir. 2005) (construing

"adjacent" as "not distant"); *Totes Isotoner Corp. v. Panther Vision, LLC*, No. 09-cv-1604, 2010 U.S. Dist. LEXIS 14, 2010 WL 55673, at *10 (N.D. Ill. Jan. 4, 2010) (construing "adjacent" as "closely proximate"); *Aero Indus., Inc. v. Quick Draw Tarpaulin Sys., Inc.*, No. 1:05-cv-0439, 2009 U.S. Dist. LEXIS 25978, 2009 WL 838684, at *11 (S.D. Ind. Mar. 27, 2009) (construing "adjacent" to mean "close to, next to, or lying near"); *Bridgelux, Inc. v. Cree, Inc.*, No. 9:06-cv-240, 2008 U.S. Dist. LEXIS 43821, 2008 WL 2325623, at *10-*11 (E.D. Tex. June 3, 2008) (construing "adjacent" to mean "near or next to"). The parties are then required to provide competent testimony as to how a person of ordinary skill in the art interprets "adjacent," "close to," or "lying near" in the technology at issue—in this case, pulsed lavage irrigation systems.

Zimmer asserts that because the irrigation handpiece at issue is by its nature compact and self-contained, adopting Stryker's definition "would effectively read the [adjacent] limitation[] out of the claim," and that "Stryker could argue that virtually all the parts are close to or near to one another." (docket # 76, at 17.) Zimmer's concern is without merit. As the Federal Circuit has repeatedly emphasized, claim construction must be consistent with the understanding of "a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1312. In other words, the term "adjacent" is not interpreted in a vacuum, but rather is informed by the field of technology, what is considered common knowledge in the field, and the invention itself. *See id.* For example, what constitutes "close" in horseshoes is markedly different than when dealing with hand grenades. Context makes all the difference.

Accordingly, the Court adopts Stryker's proposed construction of the claim term.

4. '807 Patent, Claim 45: "lock assembly"

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'807, col.27, l.35-37: a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube to said body;	Components that work together to secure or fasten the tip to the hand piece (Jt. State., docket # 61.)	Subject to 35 U.S.C. § 112 ¶ 6. Function: releasably securing the discharge tube and the suction tube to said body Structure: a tip lock, a spring plate, a biasing bar, and a flange on a tip assembly (Jt. State., docket # 61.)

Claim 45 of the '807 patent provides for "a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube of said body." ('807 patent, docket # 77-2, at 27:35-37.) The basic dispute here is whether the "lock assembly" of claim 45 is subject to a means-plus-function analysis under 35 U.S.C. § 112 ¶ 6. Zimmer argues that a person of ordinary skill in the art would not understand "lock assembly" to connote structure, and that as a result, the

claimed structure must be limited to the embodiment disclosed in the specification—a tip lock, spring plate, biasing bar, and flange that work together to secure the tip assembly to the body of the irrigation handpiece. (docket # 61.) Stryker counters that a person of ordinary skill would understand "lock assembly" as a structural term, and that section 112 ¶ 6 does not apply. Instead, Stryker broad construes "lock assembly" as "components that work together to secure or fasten the tip to the hand piece." (*Id.*)

The Court first considers whether the "lock assembly" in claim 45 is indeed structural under section 112 ¶ 6, which provides that:

> [a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112 ¶ 6. This type of claim analysis applies to "purely functional limitations that do not provide the structure that performs the recited function," *Phillips*, 415 F.3d 1311, which generally includes the hallmark "means" language that creates a rebuttable presumption that section 112 ¶ 6 applies. *See Personalized Media Commc'n, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 703-04 (Fed. Cir. 1998). "By contrast, a claim term that does

not use 'means' will trigger the rebuttable presumption that section 112 ¶ 6 does not apply." *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371-72 (Fed. Cir. 2003) (citations omitted). "When a claim terms lacks the word 'means,' the presumption can be overcome if the challenger demonstrates that 'the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1356 (Fed. Cir. 2011). "[T]he presumption flowing from the absence of the term 'means' is a strong one that is not readily overcome." *Id.; see also Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1362 (Fed. Cir. 2004) ("[W]e have seldom held that a limitation not using the term 'means' must be considered to be in means-plus-function form. In fact, we have identified only one published opinion since [*Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580 (Fed. Cir. 1996)] in which we have done so.") Given the absence of any "means" language with respect to the "lock assembly" term in claim 45, Zimmer bears the burden of overcoming the presumption against applying section 112 ¶ 6—a burden it fails to carry in this case.

Zimmer argues that the Court must engage in a mean-plus-function analysis because "lock assembly" is simply too indefinite if not limited to the structure explicitly disclosed in the '807 patent specification. (docket # 76, as 19.) This argument is unavailing. As the Federal Circuit explained in *Lighting World, Inc. v. Birchwood Lighting, Inc.*,

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> In considering whether a claim term recites sufficient structure to avoid application of section 112 ¶ 6, we have not required the claim term to denote a specific structure. Instead, we have held that it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies structures by their function.

382 F.3d at 1360 (citations omitted). In *Lighting World*, the Court recognized the possibility that applying these principles may result in a broad construction of a particular claim term that "renders a claim more vulnerable to attack for invalidity, but that the risk is one that the "claim drafter assumes by choosing broad structural terms rather than choosing to claim in means-plus-function format." *Id.* at 1362.

Applying these rules of construction to the "lock assembly" in claim 45, the Court concludes that a person of ordinary skill would understand "lock assembly" to connote structure, and section 112 ¶ 6 therefore does not apply. Claim 45 provides for "a lock assembly mounted to the front of said body for releasably securing the discharge tube and the suction tube to said body." (docket # 77-2, at 27:35-37.) A person of ordinary skill in the art would understand this claim term as describing a structure that locks the tip assembly 30 to the handpiece 22 of the irrigation system. (*Id.* at 10:12-13.) While Zimmer correctly notes that the term would cover a broad range

of structures if not subject to section 112 ¶ 6, the term is structural nonetheless. Consequently, the Court declines to apply the section 112 ¶ 6 analytical framework to "lock assembly" or otherwise limit its scope to the embodiment disclosed in the specification.

Zimmer's reliance on *Toro Co. v. Deere & Co.*, 355 F.3d 1313 (Fed. Cir. 2004), is unavailing. In *Toro*, the Federal Circuit held that the term "control mechanism" as used in the patent at issue did not provide sufficient structural description for a person of ordinary skill in the art to understand its meaning to connote structure. *Id.* at 1325. Zimmer attempts to analogize *Toro* to the present case, arguing that the "lock assembly" in claim 45 similarly lacks structure. This analogy fails to persuade the Court for two reasons. First, unlike the "lock assembly" in the '807 patent, the patentee in *Toro* used the terms "control means" and "control mechanism" interchangeably in the claim language, leading the court to conclude section 112 ¶ 6 applies. *Id.* at 1323, 1325. In other words, the intrinsic evidence provided a clear indication that "control mechanism" was not a structural term, but was rather a functional limitation synonymous with "control means." Here, Stryker gave no such indication in the '807 claim language, as it did not use "lock assembly" interchangeably with "locking means" anywhere in the '807 patent. Second, when construing "assembly" in a variety of mechanical and electrical applications, courts have consistently held that "assembly" connotes sufficient structure to avoid section 112 ¶ 6. *See, e.g., Kegel & Co. v. AMF Bowling, Inc.*, 127 F.3d 1420, 1427 (Fed. Cir. 1997); *Alto-Shaam, Inc. v. Cleveland Range, LLC*, No. 7:09-cv-018, 2010 U.S.

Dist. LEXIS 56857, 2010 WL 2382249, at *16-*18 (N.D. Tex. June 7, 2010); *Fitness Quest Inc. v. Monti*, No. 5:06-cv-2691, 2007 U.S. Dist. LEXIS 60[illegible]95, 2007 WL 2359821, at *8 (N.D. Ohio Aug. 16, 2007). Indeed, in *Lighting World* (which was decided after *Toro)*, the Federal Circuit held "connector assembly" was structural, and that the term should not be limited to the structure disclosed in the specification. 382 F.3d at 1363. While not dispositive, these other constructions further support the Court's conclusion, as do dictionary definitions, which define "assembly" as a noun connoting structure. *See, e.g.*, AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIC DICTIONARY 42 (1987).

Although section 112 ¶ 6 does not apply, the Court must still provide a claim construction of the term. The '807 specification explains that a common problem with prior surgical irrigation handpieces was their tendency to leak during use. (docket # 77-2, at 1:59-2:6.) According to the specification, leakage was particularly common when the handpiece's tip assembly was subject to side loading. (*Id.*) To address this problem, the '807 patent provides for a lock assembly that secures the tip assembly 30 to the handpiece 22. (*Id.* at 10:13-14.) The preferred embodiment teaches a tip assembly 30 that is pushed towards the handpiece 22 until the flange 186 of the discharge tube 32 passes through the opening 154 of the lock assembly. (*Id.* at 10:17-19.) "As the discharge tube 32 passes through the opening 154, [the] tapered surface 188 of [the] flange 186 abuts the complementary beveled surface 155 around [the] opening 154. Further insertion of the discharge tube 32 thus serves to displace the tip lock 152 upwardly. Once [the] flange 186 passes beyond [the] tip lock 152,

[the] spring plate 160 forces the tip lock 152 to return to its initial position," thereby mechanically locking the tip assembly 30 to the handpiece 22. (*Id.* at 10:19-31.)

While only providing a single embodiment of the lock assembly, the specification makes clear that "there is no requirement that all versions of the invention employ the described tip lock. Other versions of the invention may employ other tip locks and even other tip assemblies." (*Id.* at 21:40-43.) Stryker argues that a person of ordinary skill in the art would understand "lock assembly" to mean "components that work together to secure or fasten the tip to the hand piece." The Court agrees, as this definition is consistent with not only the claim itself, but also the preferred embodiment in the specification, which teaches a design that uses several components to secure the tip assembly 30 to the handpiece 22. Extrinsic dictionary evidence provide further confirmation of the Court's construction, as "lock" is defined as "a device used to provide restraint," and "assembly" is defined as "the putting together of manufactured parts to make a completed product." AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIC DICTIONARY 991 (1987).

Accordingly, the Court construes "lock assembly" to mean "components that work together to secure or fasten the tip to the hand piece."

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5. *'383 Patent, Claim 1: "motor operable at variable speeds"*

The parties propose the following constructions for "motor operable at variable speeds" in claim 1 of the '383 patent:

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'383, cl.1, col.21, l.58- 61: a single electric motor disposed in said housing and connected to said pump for actuating said pump, said motor operable at variable speeds to control the pumping rate of said pump;	A motor that can operate at more than one speed (Jt. State., docket # 61.)	Motor with continuously varying speed (Jt. State., docket # 61.)

The parties disagree on the meaning of the phrase "operable at variable speeds." Stryker argues that "motor operable at variable speeds" includes any motor that can operate "at more than one speed." (Jt. State., docket # 61.) In contrast, Zimmer submits that the claim term is limited to only those motors that can run at "continuously varying speed[s]." (*Id.*)

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The Court adopts Stryker's proposed construction because it is consistent with the intrinsic evidence of record, and Zimmer's is not. Claim 1 of the '383 patent provides for "a single electric motor," with the "motor operable at variable speeds to control the pumping rate of said pump." (docket # 77-3, at 21:58-61.) A person of ordinary skill in the art would understand the use of the term "variable" that modifies "speed" to mean a motor operating at more than one speed. However, there is nothing in the plain language of claim 1 that inherently requires a continuous spectrum of speed. In fact, Zimmer's proposed construction tacitly recognizes this by using the core claim language in its proposed construction and simply adding the modifier "continously" to it. The claim language, in contrast, does not include the limiting modifier, or anything like it.

The specification of the '383 patent reinforces the point. It describes the preferred embodiment of the medical irrigator. The specification describes a motor 36 that a user can turn on using a trigger lever 242 that is made of bendable, resilient plastic. (*Id.* at 14:54-64.) The rest position of the trigger lever 242 allows the motor 36 to remain in the "off" position. (*Id.*) When a user exerts a "light pull on the trigger lever 242," the motor 36 turns on, and "electric current is fed to the motor 36 only from half the battery collection," causing the motor 36 to run "at only a preselected fraction of its full speed and the pump unit 100 outputs irrigation liquid pulses at a desired frequency and amplitude, which are less than the maximum available" ("lower power pulsing"). (*Id.* at 14:64-15:10.) "Further pulling in of the trigger lever 242

by the user . . . establishes electrical contact . . . [that] appl[ies] the full series of voltage . . . to the motor 36 to operate the latter at its full speed and thereby drive the pump unit 100 at its full output" ("high power pulsing"). (*Id.* at 15:11-15:25.) In sum, the preferred embodiment teaches a motor with three discrete predetermined speed settings: "off," lower power pulsing (which engages half of the battery pack power source), and high power pulsing (which engages all of the battery pack power source). (*Id.* at 21:1-2.) It does not include a continuous spectrum of varying speeds.

The problem with Zimmer's proposed construction is that it unduly limits the claim term to "continuously variable speed" motors, excluding the preferred embodiment just discussed. Zimmer's construction would require the irrigator to operate on a continuous speed spectrum, excluding motors that only operate at predetermined, discrete speed settings. The Federal Circuit has repeatedly held, "[a] claim construction that excludes the preferred embodiment is rarely, if ever, correct." *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010). Zimmer's proposed construction runs afoul of this fundamental principle, as it would exclude the preferred embodiment disclosed in the specification, and nothing in the intrinsic or extrinsic evidence supports that.

At oral argument, Zimmer relied almost exclusively on the prosecution history to support its narrower definition of the term, but the reliance is misplaced. The record before the Court provides no reason to infer

that Stryker's amendment during prosecution—which cancelled virtually all of its original claims and substituted new ones—was intended to narrow the type of motor the allowed claims cover. "Unless altering claim language to escape examiner rejection, a patent applicant only limits claims during prosecution by clearly disavowing claim coverage." *See IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1439 (Fed. Cir. 2000). The record does not provide any evidence that indicates Stryker amended its claims to disavow any portion of the claim language's plain meaning.[3] Consequently, the Court declines to narrow its construction on this basis, instead adopting Stryker's construction of "motor operable at variable speeds" to mean "a motor that can operate at more than one speed."

6-7. '383 Patent, Claim 10, 38: "variable speed electric motor"
'383 Patent, Claim 20: "motor operating at variable speeds"

The parties also disagree as to the construction of "variable speed electric motor" in claims 10 and 38 of the '383 patent, and "motor operating at variable speeds" in claim 20, as illustrated below:

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3. Stryker's claim amendment replaced all mention of "plural speed motors" with "variable speed motors" without any discussion as to the difference between the two, and narrowing the claim term based on this modification is not warranted.

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Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'383, cl. 10, col.22, l.53- 55: a single, variable speed electric motor in said housing that is connected to said pump that actuates said pump so as to regulate the pumping rate of said pump; '383, cl. 38, col.26, l.5-7: a single, variable speed electric motor disposed in said housing connected to said pump for actuating said pump at variable rates; '383, col.23, l.56-59: a single electric motor disposed in said housing and connected to said pump to actuate said pump, said motor operating at variable speeds to regulate the pumping rate of said pump;	An electric motor that can operate at more than one speed (Jt. State., docket # 61.) A motor that can operate at more than one speed (Jt. State., docket # 61.)	Electric motor with continuously variable speed (Jt. State., docket # 61.) Motor with continuously varying speeds (Jt. State., docket # 61.)

With respect to these claim terms, each party simply proposes the same construction as in claim 1, with the only exception that both parties' construction of "variable speed electric motor" in claims 10 and 38 provides the additional limitation that the motor must be electric. Because the constructions proposed for claims 1, 10, 20, and 38 all replicate each other, the Court will apply the same analysis to all of these claims and adopt Stryker's construction of the terms. *See Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc.*, 389 F.3d 1370, 1377 (Fed Cir. 2004.)

Accordingly, the Court construes "variable speed electric motor" as "an electric motor that can operate at more than one speed," and construes "motor operating at variable speeds" as "a motor that can operate at more than one speed."

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8. '383 Patent, Claims 1, 20, and 38: "control assembly"

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'383, cl.1, col.21, l.62- 63: a control assembly disposed in said housing to regulate the speed of said motor; '383, cl. 20, col.23, l.66- col.24, ln.4: a control assembly integral with said housing, said control assembly having a switch member moveably mounted to said housing and said control assembly being configured to apply a variable energization signal from said battery pack to said motor so as to control the speed of said motor and regulate the pumping rate of said pump.	Components that work together to energize the motor (Jt. State., docket # 61.)	Subject to 35 U.S.C. § 112 ¶ 6. Function: - Claim 1: regulate the speed of said motor - Claim 20: control the speed of said motor and regulate the pumping rate of said pump - Claim 38: supplying a variable potential energization signal to said motor

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'383, cl. 38, col.26, l.15-24: a control assembly attached to said housing and connected between said at least one conductor of said motor for supplying a variable potential energization signal to said motor, said control assembly having a single switch member that is moveably attached to said housing that selectively makes/breaks a connection between said at least one conductor and said motor and that establishes the potential of the energization signal supplied to said motor.		Structure: an L-shaped trigger member with an elongate trigger lever, a single switch contact support arm, a single conductive contact blade, two posts integral with the housing that are configured for electrical contacts to be mounted on them, two electrically-conductive, spring-like metal contacts mounted to said posts, and two electrically conductive contacts protruding rearwardly from the motor, one being a springy rectangular piece that is bent intermediate its ends in a dogleg fashion. (Jt. State., docket # 61.)

Similar to the issue between the parties regarding the "lock assembly" claim construction, the parties disagree as to whether "control assembly" requires the Court to engage in a means-plus-function analysis under 35 U.S.C. § 112 ¶ 6. Zimmer argues that the term "does not convey sufficiently definite structure to one of ordinary skill in the art," and the claim term must therefore be limited to the structures disclosed in the '383 patent specification. (docket # 76, at 25.) Stryker disagrees, arguing that "[i]n the context of the '383 patent, a person of ordinary skill would understand the term 'control assembly' to mean 'components that work together to energize the motor.'" (docket # 66, at 22.) Zimmer bears the burden of proving section 112 ¶ 6 applies. *Thyssenkrupp*, 649 F.3d at 1356. The Court concludes that Zimmer has not carried its burden.

Claims 1 and 38 of the '383 patent both provide for a control assembly in the housing of the handheld irrigator "to regulate the speed of [the] motor" by "apply[ing] a variable energization signal" to the motor from the irrigator's battery pack "to control the speed of said motor" and to "regulate the pumping rate of [the] pump." (docket # 77-3, at 23:66-24:4; 26:15-24.) As discussed above, the term "assembly," though broad, would connote structure to a person of ordinary skill in the art. *See Lighting World*, 382 F.3d at 1363; *Kegel*, 127 F.3d at 1427; *Alto-Shaam*, 2010 U.S. Dist. LEXIS 56857, 2010 WL 2382249 at *16-*18; *Fitness Quest*, 2007 U.S. Dist. LEXIS 60195, 2007 WL 2359821, at *8. Stryker did not utilize means-plus-function language within the claim, and the Court sees no reason to apply section 112 ¶ 6 in its

absence, given the structure the term "control assembly" connotes as used in the '383 patent.

Even though section 112 ¶ 6 does not apply, a construction is still necessary in light of the parties' disagreement as to the term's plain and ordinary meaning. Claims 20 and 38 state that the control assembly includes a "switch member," and that the assembly must be configured "to apply a variable energization signal" from the batteries in order to power and control the speed of the motor and regulate the irrigation pump rate. (*Id.* at 23:66-24:4; 26:15-24.) Against this backdrop, a person of ordinary skill in the art would construe the "control assembly" in the '383 patent as "components that work together to energize the motor," which is the construction Stryker proposes and the Court adopts as to this claim term. *See Lighting World, Inc.*, 382 F.3d at 1360 (holding that structural definitions may identify their function).

This construction is further confirmed when claims 20 and 38 are read in conjunction with dependent claims 22 and 40, which recite additional structural requirements of the control assembly. Claim 22 provides a claim requirement that further requires the control assembly to include two electrical conductors that are positioned so that "a switch member can be . . . positioned to: connect neither of said cable conductors to said motor; connect the first said cable conductor to said motor; or connect the second said cable conductor to said motor." (docket # 77-3, at 24:20-29.) Claim 42 requires a similar cable conductor configuration. (*Id.*) If the Court adopted Zimmer's narrow definition, the construction of the independent claims

would render the dependent claims superfluous—an outcome strongly disfavored when construing a claim term. *See, e.g., Phillips*, 415 F.3d at 1315; *Yoon Ja Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1319 (Fed. Cir. 2006); *Versa Corp. v. Ag-Bag Int'l Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004).

The extrinsic evidence further confirms the Court's construction. Generally speaking, "control" is commonly used to describe "any set of instruments used to operate, regulate, or guide a machine." AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIC DICTIONARY 381 (1987). And as previously noted, "assembly" is defined as "the putting together of manufactured parts to make a completed product." *Id.* at 42. Taken together, the Court is persuaded "control assembly" would be understood in common parlance to refer to a structure comprised of "parts that work together to operate, regulate, or guide a machine." Here, the "control assembly" in Claims 1 and 38 serve the express purpose of engergizing the motor of the irrigator. Accordingly, the Court construes "control assembly" as "components that work together to energize the motor."

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9. '383 Patent, Claim 10: "switch assembly"

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'383, col.22, l.63-col.23, 1.9: A switch assembly mounted to said housing for selectively establishing a connection between at least one of said conductors and said motor, said switch assembly having a switch element moveably attached to said handle, said switch assembly being configured so that: when said switch element is in a first position, said switch assembly does not supply an energization signal to said motor; when said switch element is in a second position,	Components that work together to make, break or change an electric circuit (Jt. State., docket # 61.)	Subject to 35 U.S.C. § 112 ¶ 6. Function: selectively establishing a connection between at least one of said conductors and said motor Structure: a single conductive contact blade, two posts integral with the housing that are configured for electrical contacts to be mounted on them, two electrically-conductive, spring-like metal contacts mounted to said posts, and two electrically conductive contacts protruding rearwardly from the motor, one being a springy rectangular

said switch assembly supplies a first energization signal from said battery pack to said motor; and when said switch element is in a third position, said switch assembly supplies a second energization signal from said battery pack to said motor.		piece that is bent intermediate its ends in a dogleg fashion (Jt. State., docket # 61.)

With respect to the "switch assembly" in claim 10 of the '383 patent, the core issue is once again whether the term connotes sufficient structure for a person of ordinary skill in the art to understand its meaning. Zimmer submits that ""switch assembly" does not connote sufficiently definite structure to one of ordinary skill in the art and thus should be construed under section 112 ¶ 6, which would limit the "switch assembly" to embodiments disclosed in the specification. (docket # 76, at 27.) In contrast, Stryker argues "switch assembly" should not be limited to the embodiments in the specification under section 112 ¶ 6, but rather should be construed as "components that work together to make, break or change an electric circuit." (docket # 61.)

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Claim 10 of the '383 patent provides for a "switch assembly mounted to said housing for selectively establishing a connection between at least one of" the conductors included in the irrigation handpiece to the motor. (docket # 77-3, at 22:63-67.) Claim 10 further provides that the switch assembly includes a "switch element moveably attached to [the] handle" and that the switch assembly must be configured so that it provides an "off," "first energization signal," and "second energization signal" from the device's battery pack to the motor. (*Id.* at 22:63-23:10.) Given that the hallmark means-plus-function language is absent from the '383 patent, Zimmer once again bears the burden to prove that section 112 ¶ 6 should apply.

Based on the claim language and other intrinsic evidence, however, the Court concludes a person of ordinary skill in the art would consider "switch assembly" to connote structure, and declines to apply section 112 ¶ 6. In addition to including the structural term "assembly" within the claim, the claim provides further limitations that confirm "switch assembly" is indeed structural. For example, the switch assembly includes a "switch member," which the parties do not dispute is a structural term, and is mounted on the housing of the irrigation handpiece. A person of ordinary skill would necessarily consider "switch assembly" as a structural term, given the structural definitions and positioning descriptions provided for in the claim language itself. Consequently, the Court holds that section 112 ¶ 6 does not apply.

The specification also supports this construction. As noted above, the "switch assembly" must be configured

"for selectively establishing a connection between at least one of said conductors and said motor." (*Id.* at 22:63-67.) A person of ordinary skill in the art would understand that a number of different switch assembly configurations could accomplish this functional requirement. The parties agree that the preferred embodiment discloses a structure consistent with Zimmer's proposed claim construction. Contrary to Zimmer's position, however, the Court concludes a person of ordinary skill in the art, who at a minimum possesses "a bachelor's degree in mechanical engineering and 2-3 years of industry experience relating to the design of medical devices," would not be limited to this disclosed configuration. (docket # 79, Milroy Decl. ¶ 18.) Rather, a person of ordinary skill in the art would define "switch assembly" as components that work together to make, break or change an electric current.

The extrinsic evidence confirms this construction. A "switch" is commonly defined as "a device for making, breaking, or changing an electric circuit." CHAMBER'S CONCISE DICTIONARY 1081 (1991). Taken together with the definition of "assembly" discussed above, a person of ordinary skill in the art would construe a "switch assembly" to mean "components that work together for making, breaking, or changing an electrical circuit." The Court concludes that this definition, although expansive, conveys sufficient structure to be understood by one of ordinary skill in the art, and would indeed be the definition a person of ordinary skill in the art would associate with "switch assembly."

Accordingly, the Court adopts Stryker's proposed definition of the claim term.

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10. '383 Patent, Claims 20 and 38: "switch member"

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'383, cl. 20, col.23, l.66- col.24, ln.4: a control assembly integral with said housing, said control assembly having a switch member moveably mounted to said housing and said control assembly being configured to apply a variable energization signal from said battery pack to said motor so as to control the speed of said motor and regulate the pumping rate of said pump. '383, cl. 38, col.26, l.15- 24: a control assembly attached to said housing . . . said control assembly	A part for directing an electric current (Jt. State., docket # 61.)	Electrically conductive contact blade (Jt. State., docket # 61.)

having a single switch member that is moveably attached to said housing that selectively makes/ breaks a connection between said at least one conductor and said motor and that establishes the potential of the energization signal supplied to said motor.		

The parties disagree as to the construction of "switch member" in claims 20 and 38 of the '383 patent. Stryker proposes a broad construction, arguing that the "switch member" should be construed to include any part that directs an electric current. (docket # 61.) Zimmer proposes a much more limited definition, essentially seeking to limit "switch member" to an electric conductive contact blade, such as the one disclosed in the preferred embodiment. (*Id.*) Neither party has proposed a convincing construction for the term.

Stryker's proposed definition is overly broad. While its construction would certainly encompass the contact blade disclosed in the '383 specification, it would also include conductors, motors, wires, and any other structure that is physically capable of "directing an electric current." A person would not have such a broad understanding of

"switch member," particularly as it is used in the '383 patent. Stryker's definition would improperly encompass various other claim limitations (the conductors and electric motor, for example), rendering claim terms superfluous and the claim itself nonsensical. In contrast, Zimmer's definition is unduly restrictive, seeking to limit the "switch member" to the type disclosed in the preferred embodiment—a conductive contact blade. A person of ordinary skill in the art would not adopt such a limited definition. The contact blade 253 simply serves to make, break, or otherwise change the electricity flow in the handpiece's electrical circuit, and a person of ordinary skill would construe the switch member as such.

Accordingly, the Court construes "switch member" as "a component for making, breaking, or changing an electric circuit." This construction is preferable, as it is consistent with the '383 patent as a whole. As discussed above, a person of ordinary skill in the art would understand "switch" to mean "a device for making, breaking, or changing an electric circuit." CHAMBER'S CONCISE DICTIONARY 1081 (1991). In construing "switch assembly," the Court adopted the fundamental definition of "switch," and sees no principled reason to depart from this definition here.

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CONCLUSION

This Claim Construction Memorandum addresses only the limited patent terms the parties selected for construction at this time, hoping this Court's construction would facilitate framing and resolution of the issues on dispositive motion practice or trial. The Court anticipates addressing any further claims construction issues in the context of dispositive motion practice, and preparation of the final pretrial order and jury instructions on any claims or defenses that go to trial.

IT IS SO ORDERED.

Dated: February 1, 2012

/s/ Robert J. Jonker
ROBERT J. JONKER
UNITED STATES DISTRICT JUDGE